FIG. 1

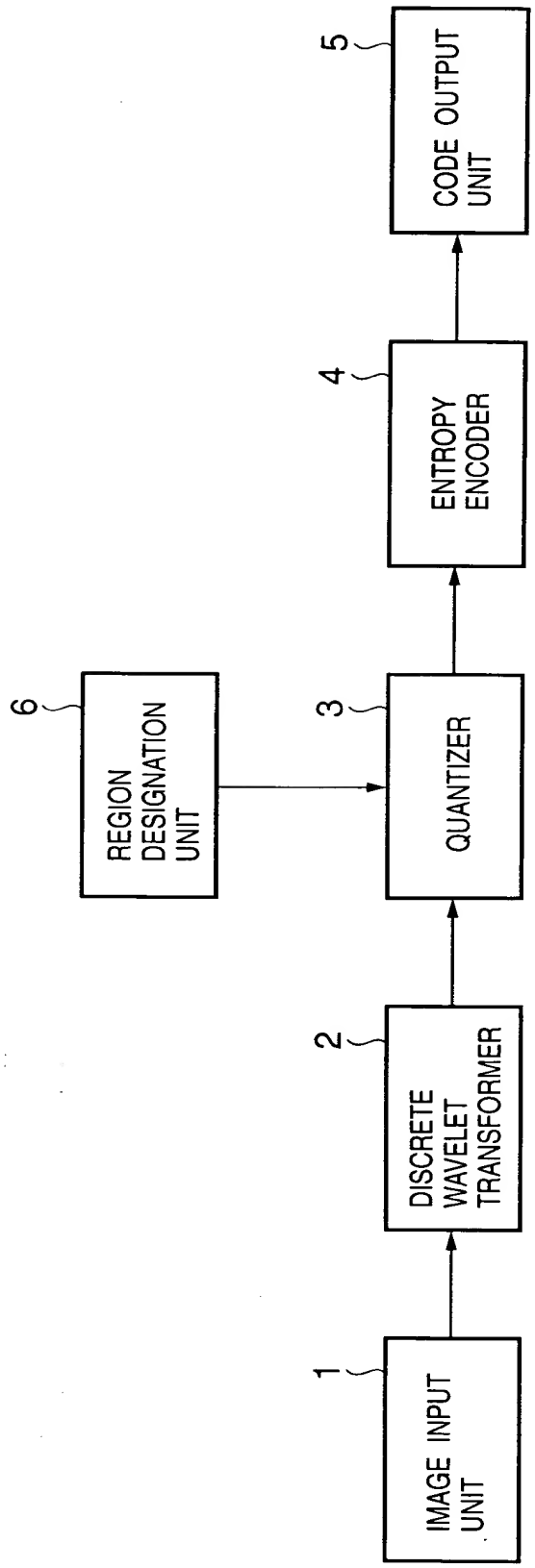

1
IMAGE INPUT UNIT
2
DISCRETE WAVELET TRANSFORMER
3
QUANTIZER
4
ENTROPY ENCODER
5
CODE OUTPUT UNIT
6
REGION DESIGNATION UNIT

FIG. 2

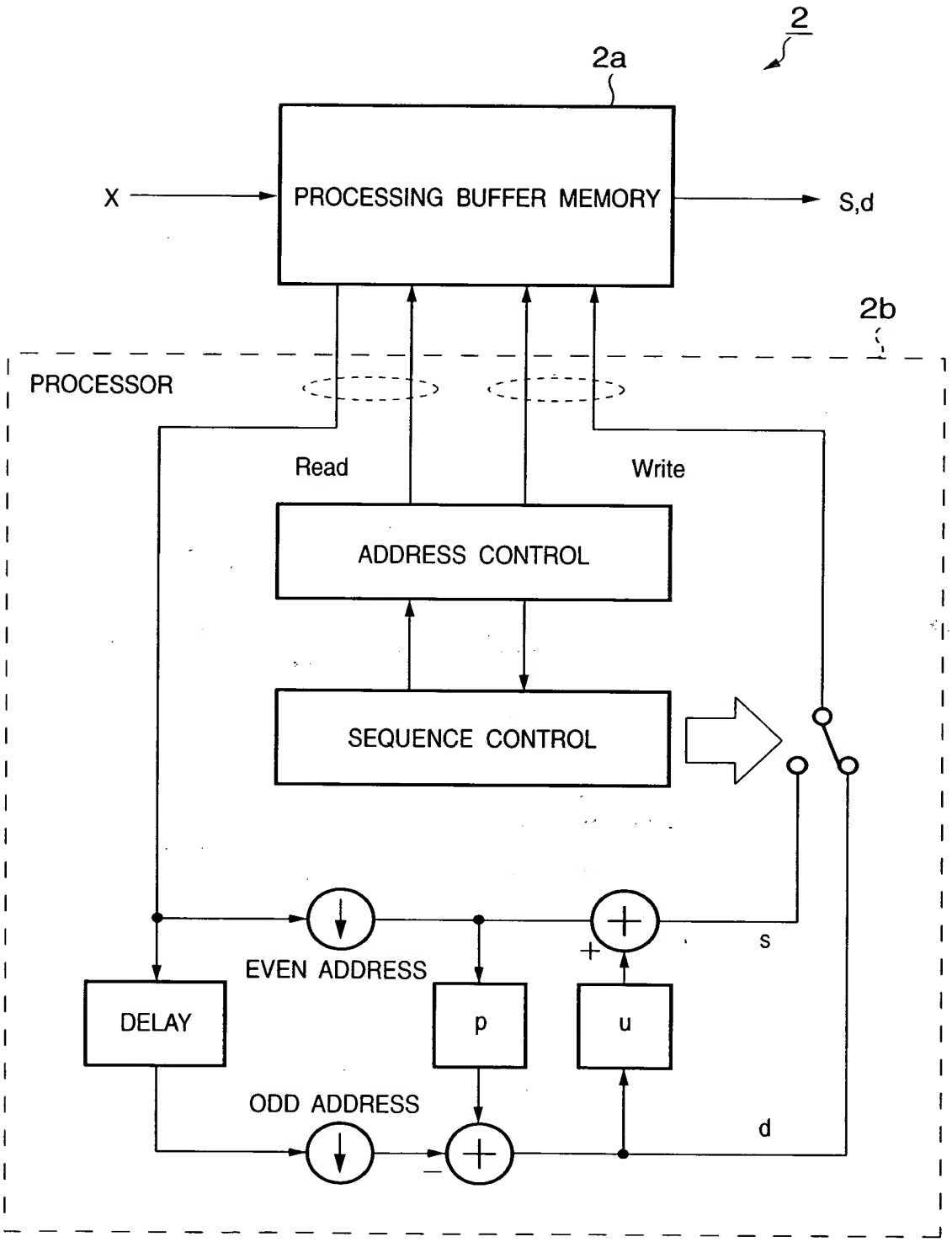
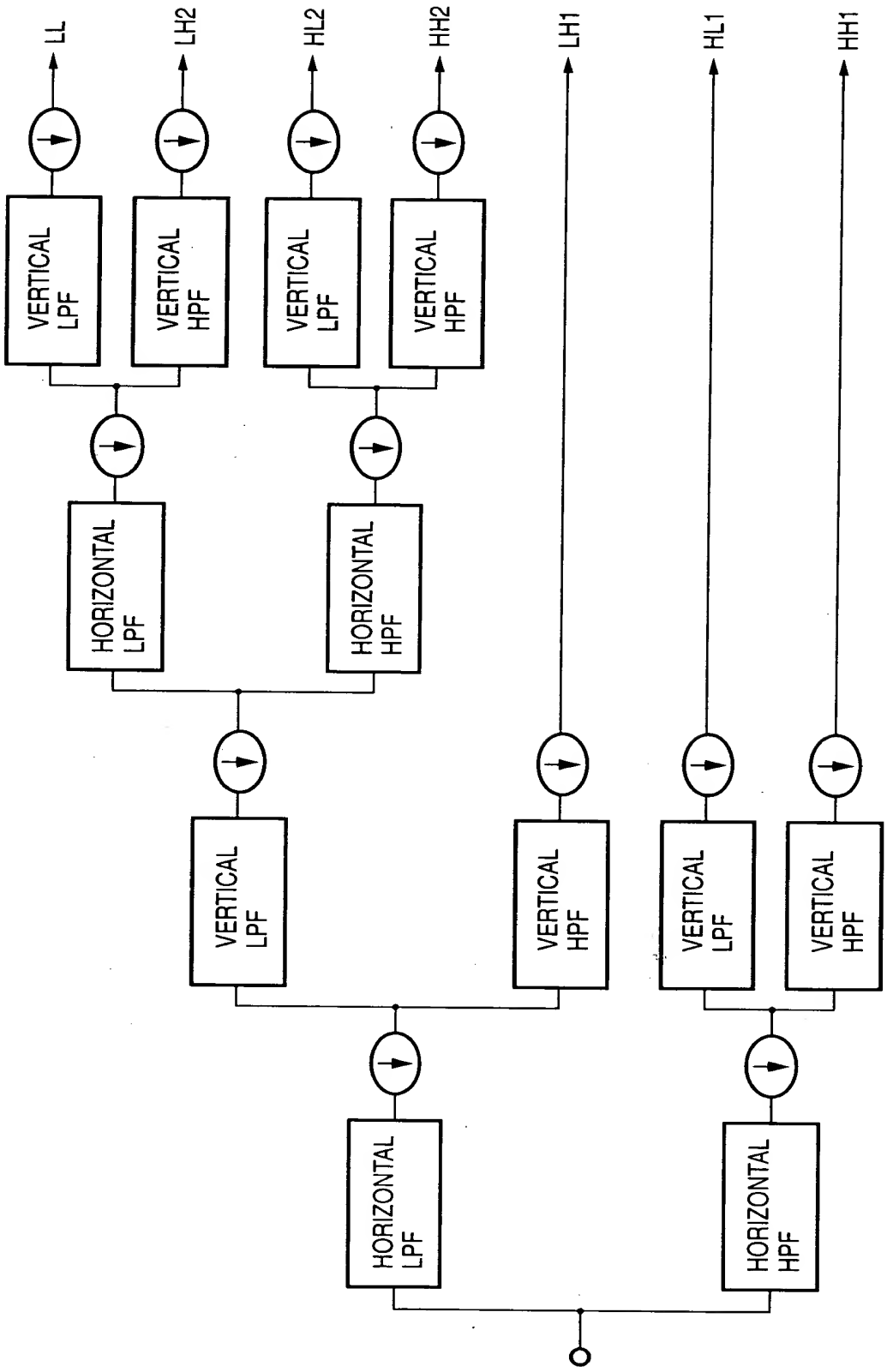

2
2a
X
PROCESSING BUFFER MEMORY
S,d
2b
PROCESSOR
Read
Write
ADDRESS CONTROL
SEQUENCE CONTROL
EVEN ADDRESS
DELAY
p
u
s
ODD ADDRESS
d

FIG. 3A



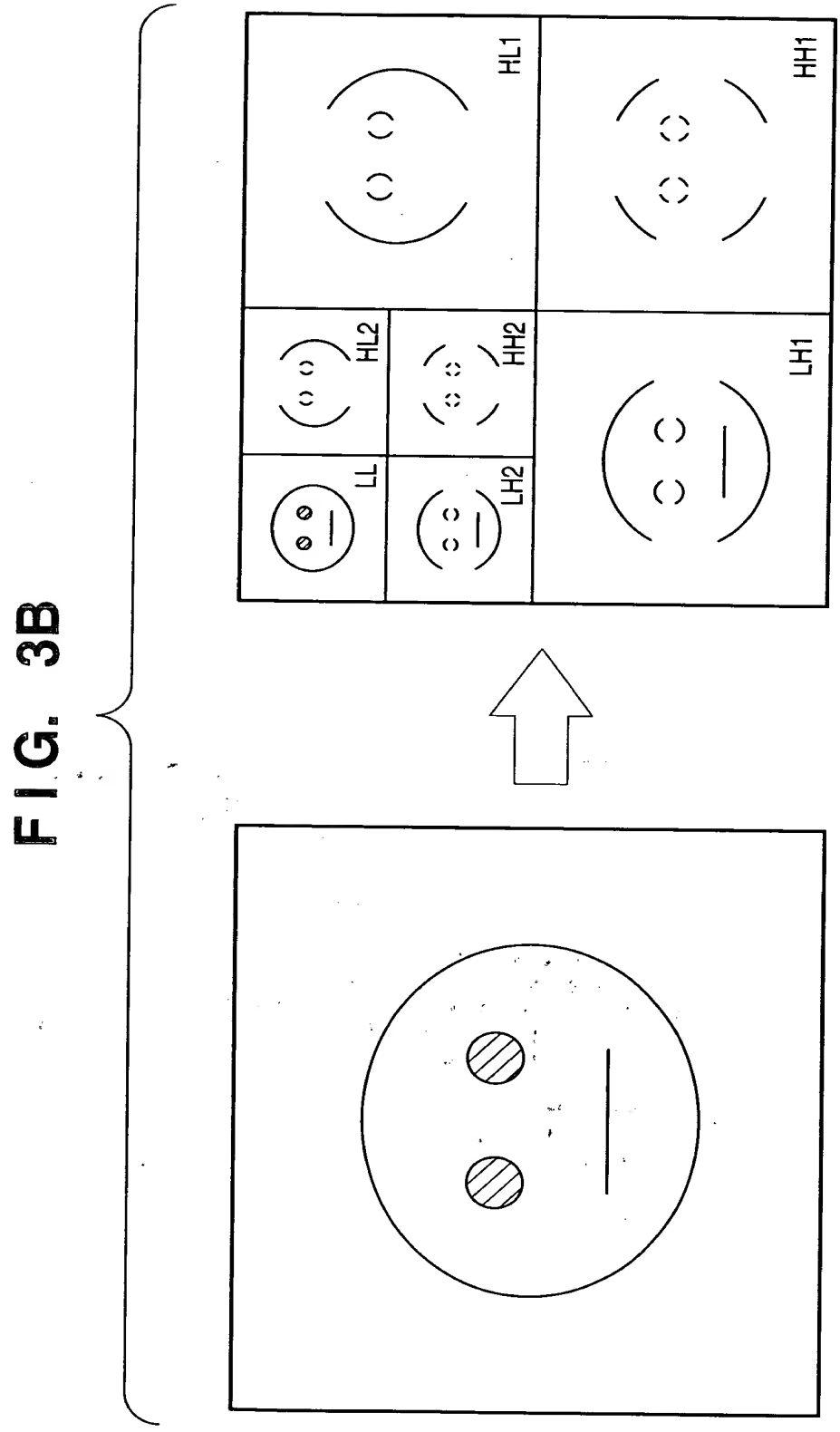


FIG. 3B

FIG. 4A

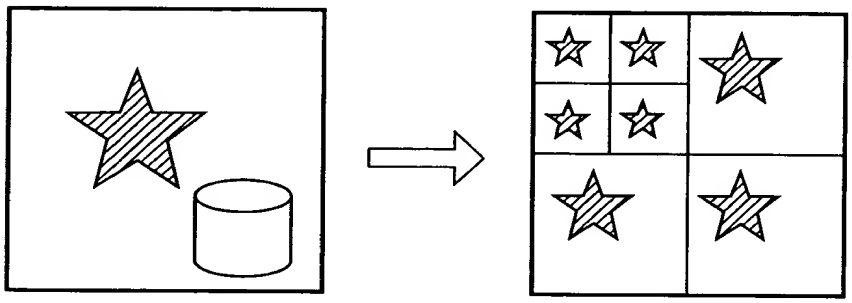


FIG. 4B

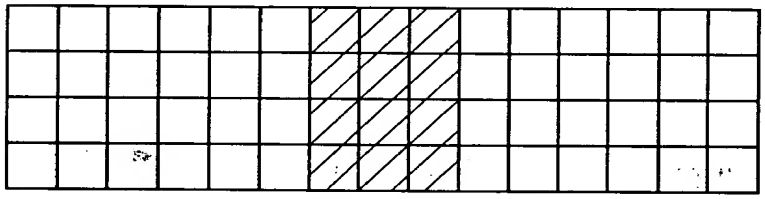


FIG. 4C

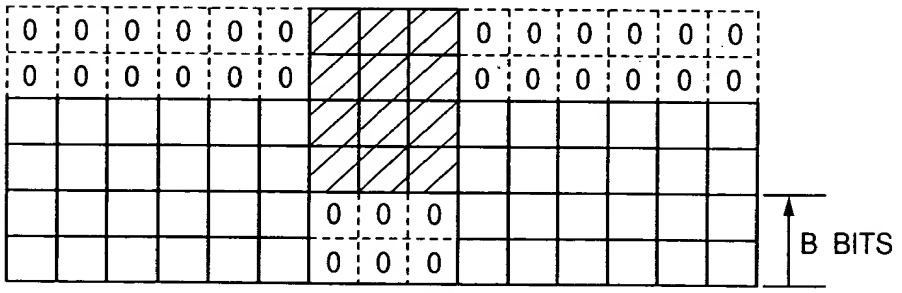


FIG. 5A

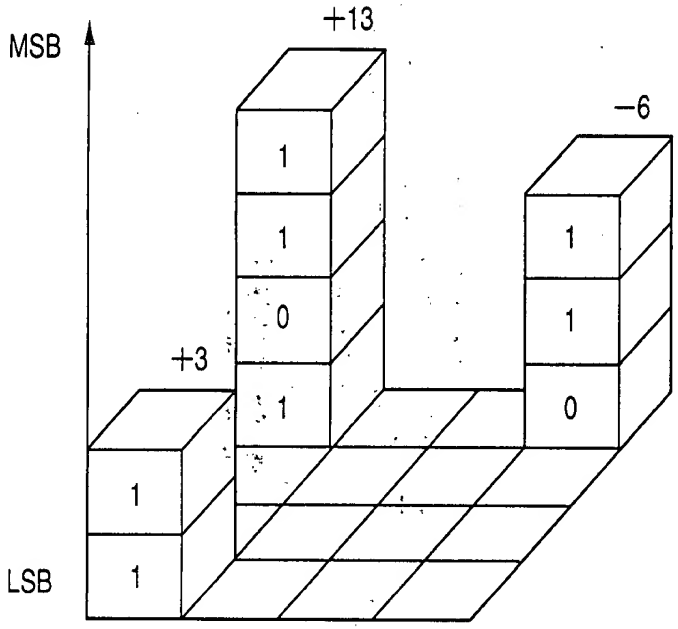

MSB
LSB
+13
+3
−6
1
1
0
1
1
1
1
1
0

FIG. 5B

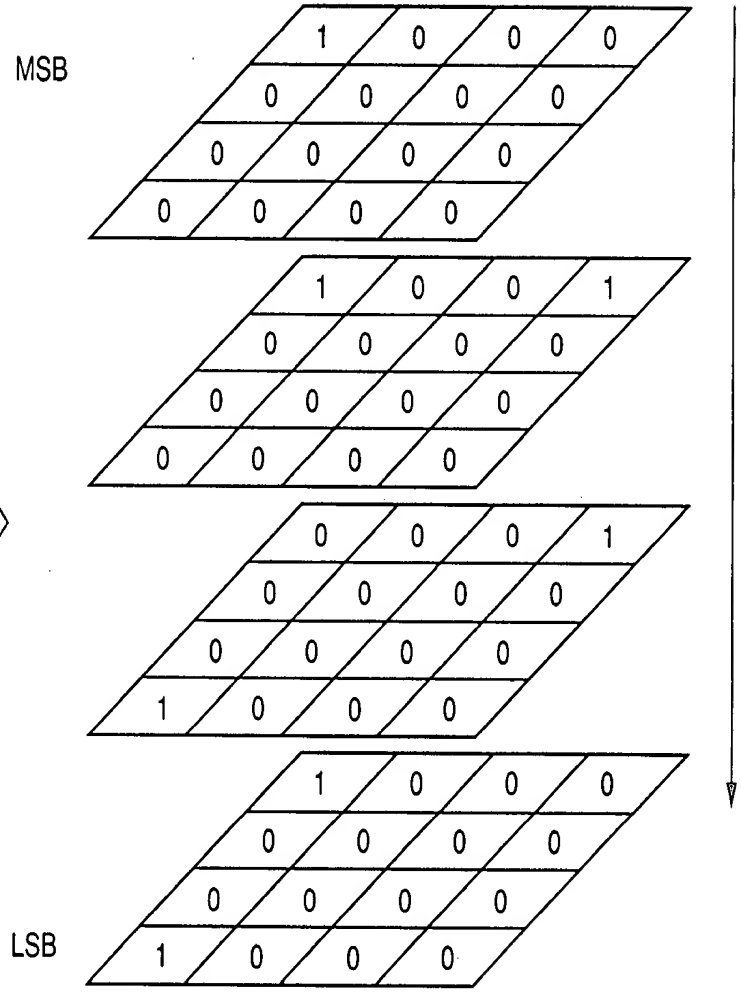

MSB
LSB
1 0 0 0
0 0 0 0
0 0 0 0
0 0 0 0
1 0 0 1
0 0 0 0
0 0 0 0
0 0 0 0
0 0 0 1
0 0 0 0
0 0 0 0
1 0 0 0
1 0 0 0
0 0 0 0
0 0 0 0
1 0 0 0

FIG. 6A

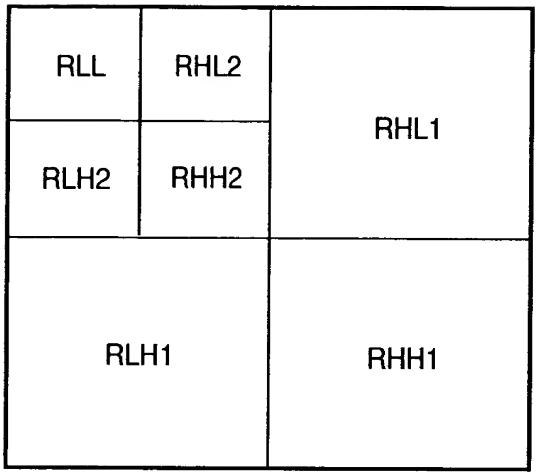


FIG. 6B

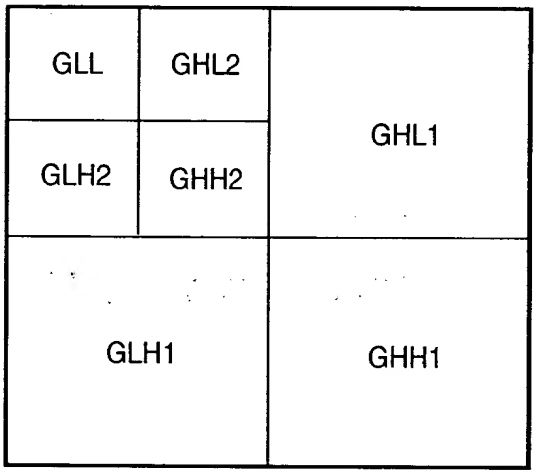


FIG. 6C

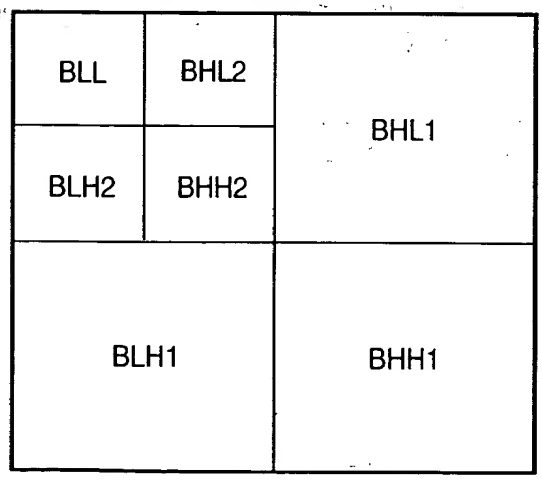


FIG. 7A

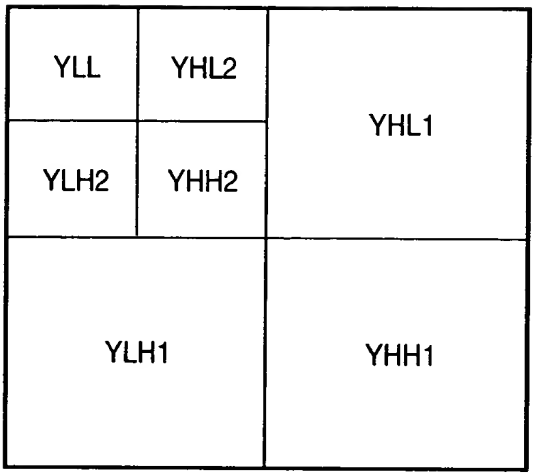


FIG. 7B

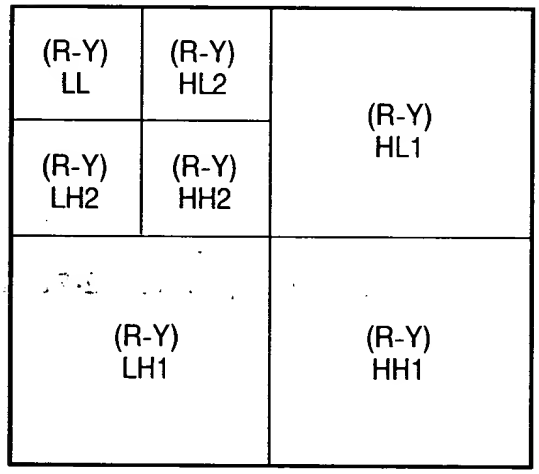


FIG. 7C

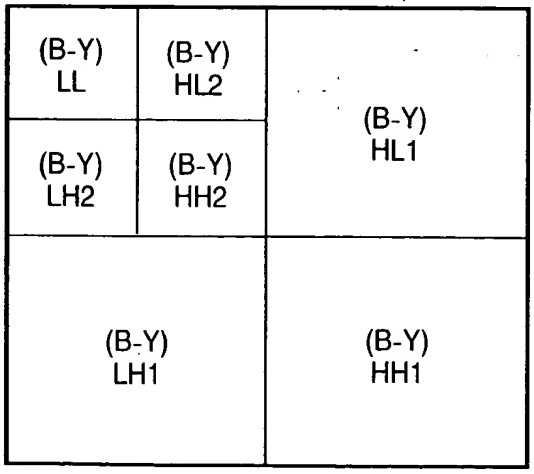


FIG. 8A

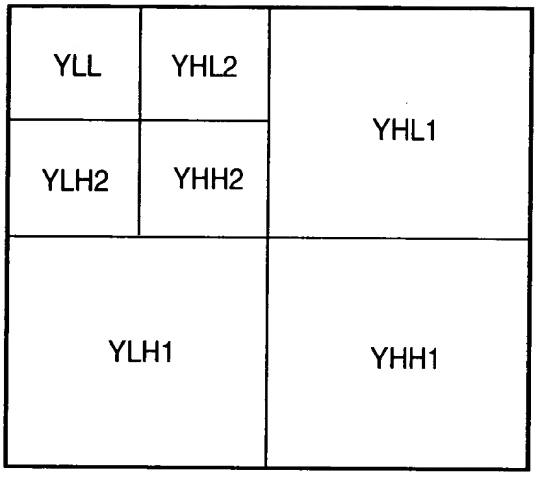


FIG. 8B

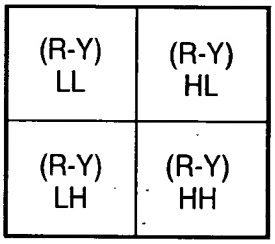


FIG. 8C

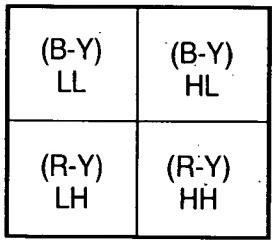


FIG. 9A

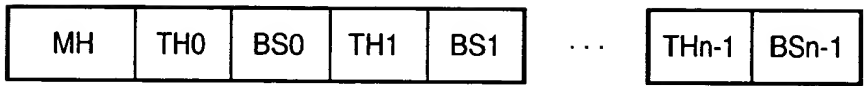


FIG. 9B

FIG. 9C

FIG. 9D

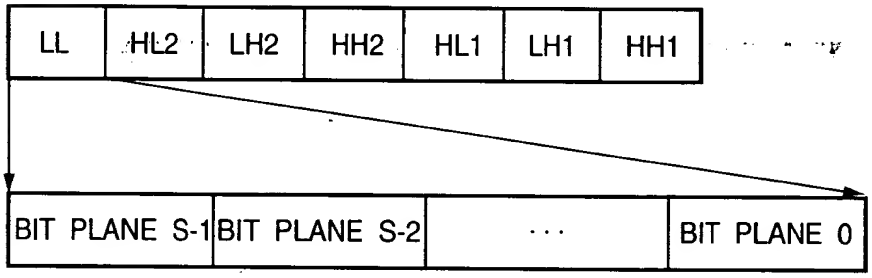


FIG. 9E

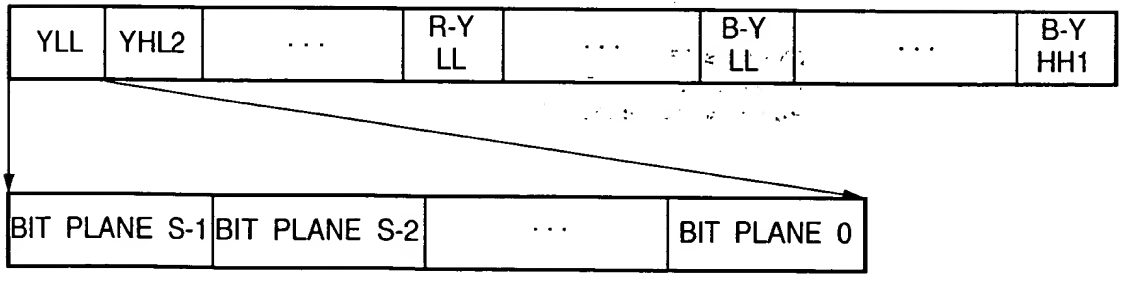


FIG. 10A

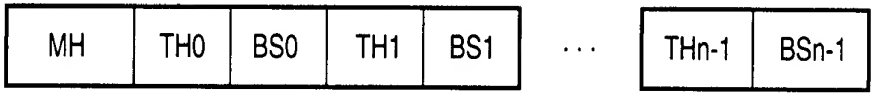


FIG. 10B

FIG. 10C

FIG. 10D

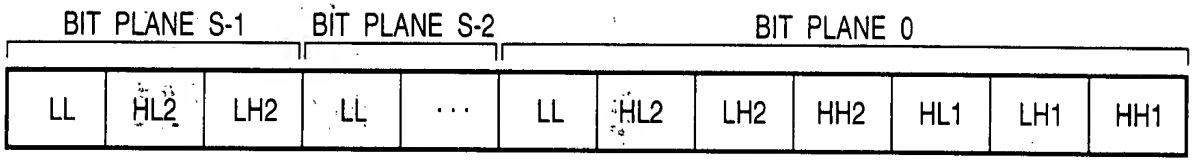


FIG. 10E

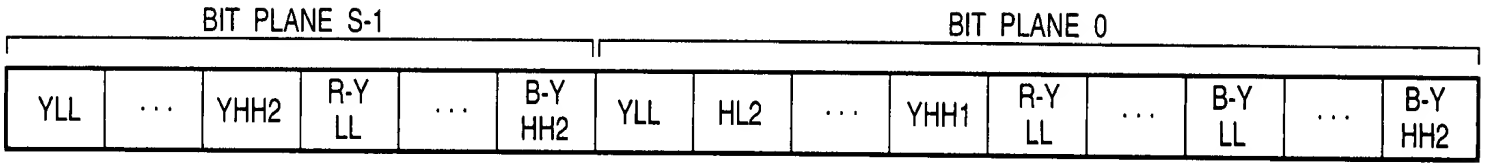


FIG. 11

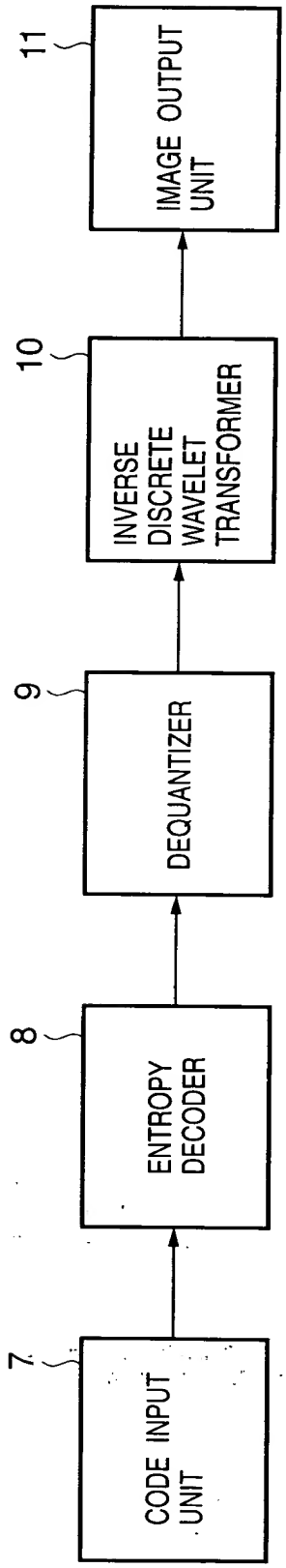

7
CODE INPUT UNIT
8
ENTROPY DECODER
9
DEQUANTIZER
10
INVERSE DISCRETE WAVELET TRANSFORMER
11
IMAGE OUTPUT UNIT

FIG. 12A

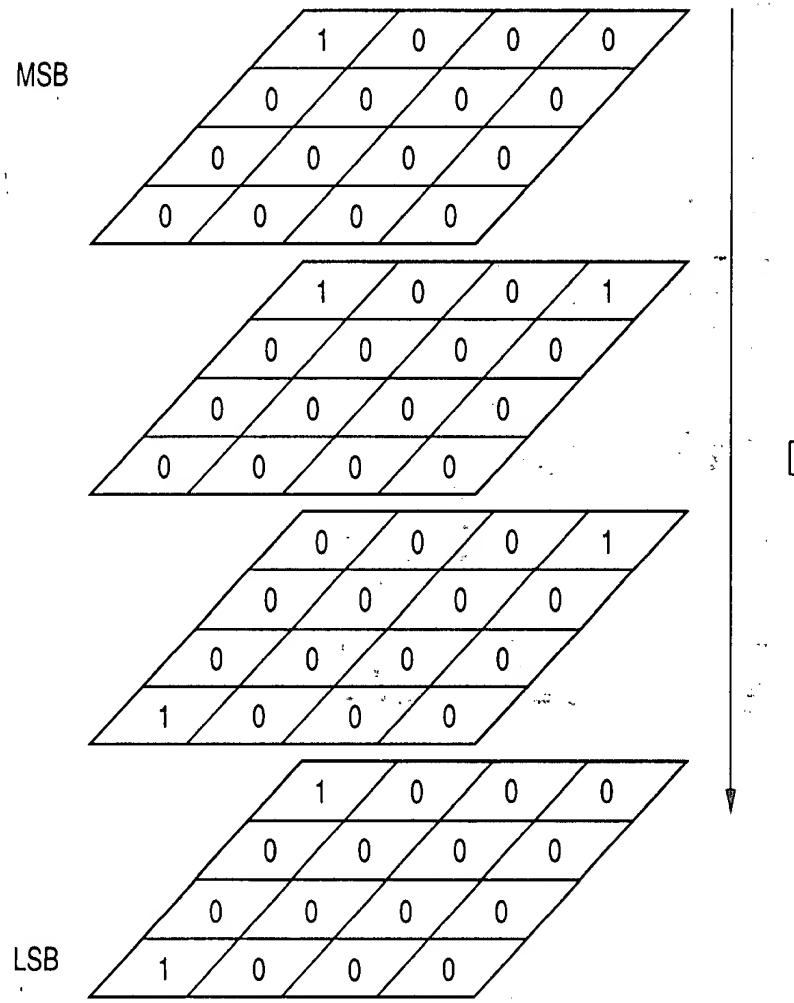


FIG. 12B

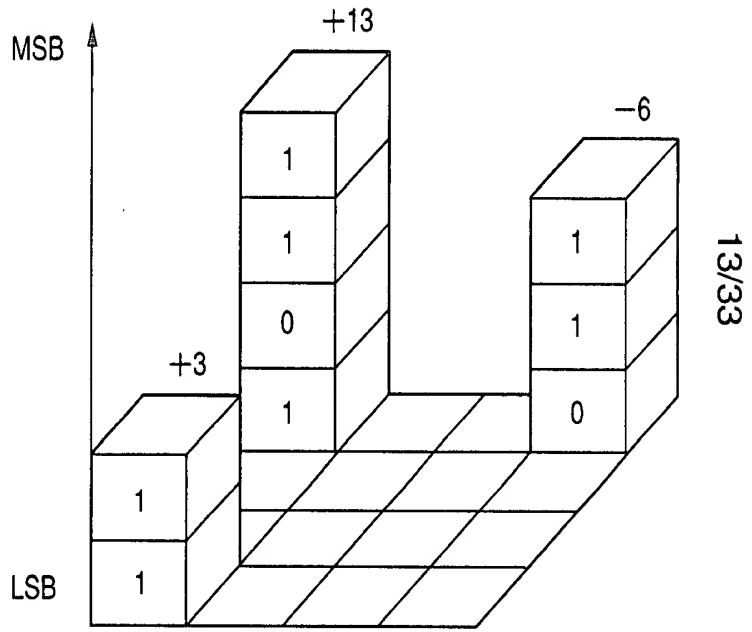


FIG. 13

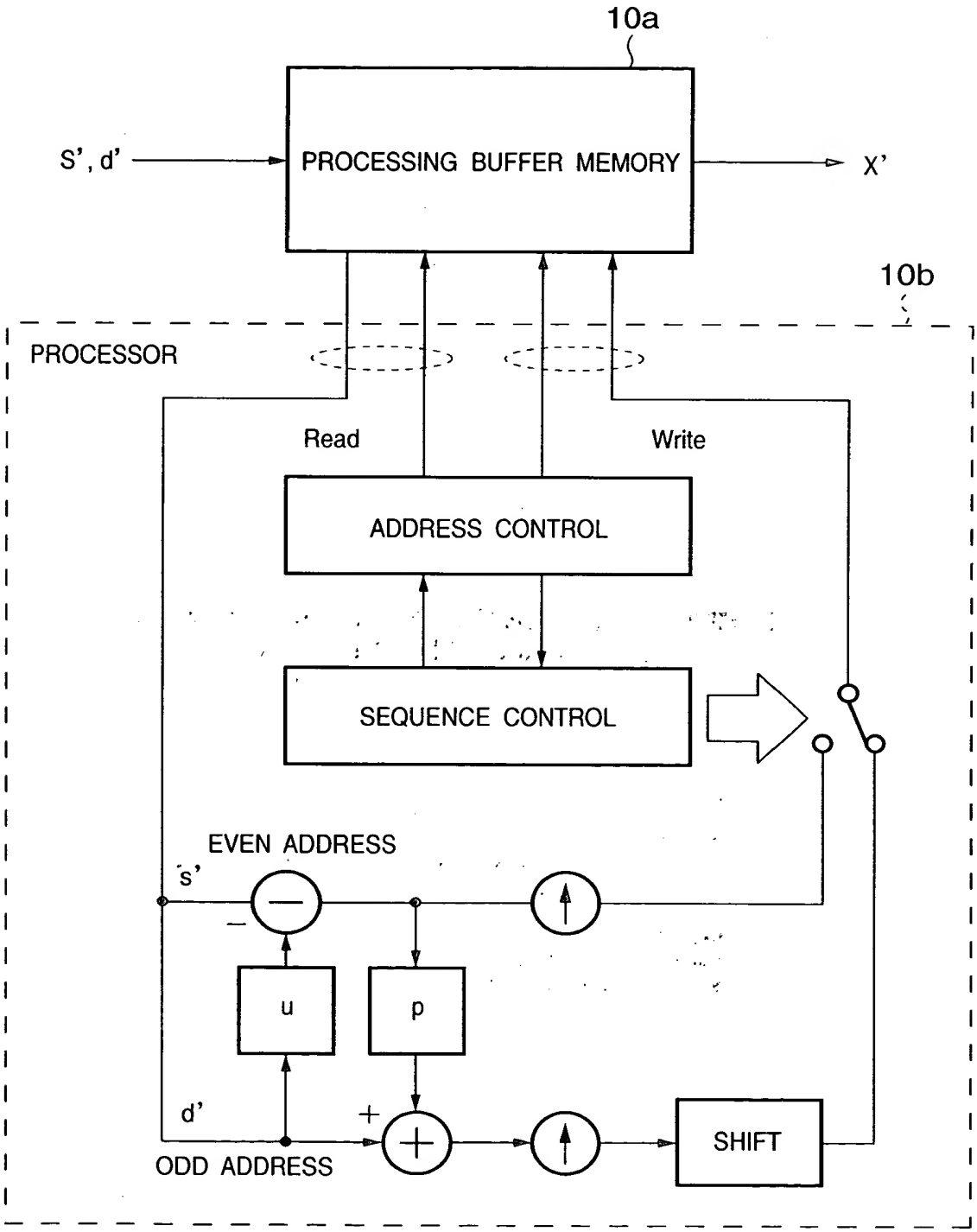

10a
S', d'
PROCESSING BUFFER MEMORY
X'
10b
PROCESSOR
Read
Write
ADDRESS CONTROL
SEQUENCE CONTROL
EVEN ADDRESS
s'
u
p
d'
ODD ADDRESS
SHIFT

FIG. 14A

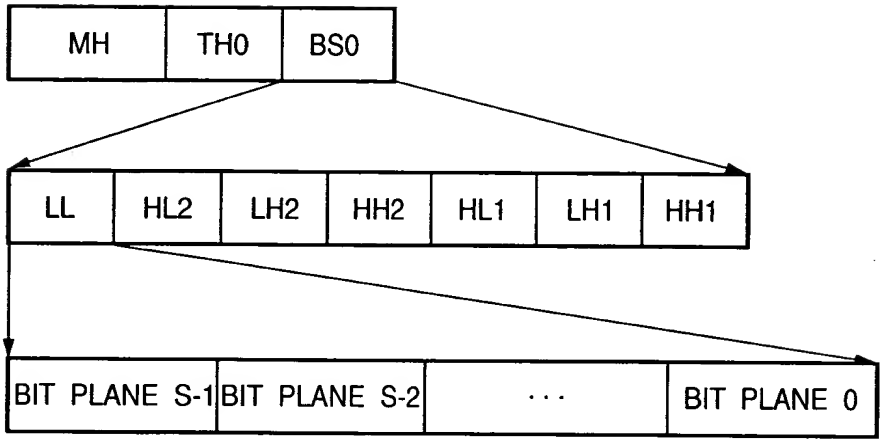


FIG. 14B

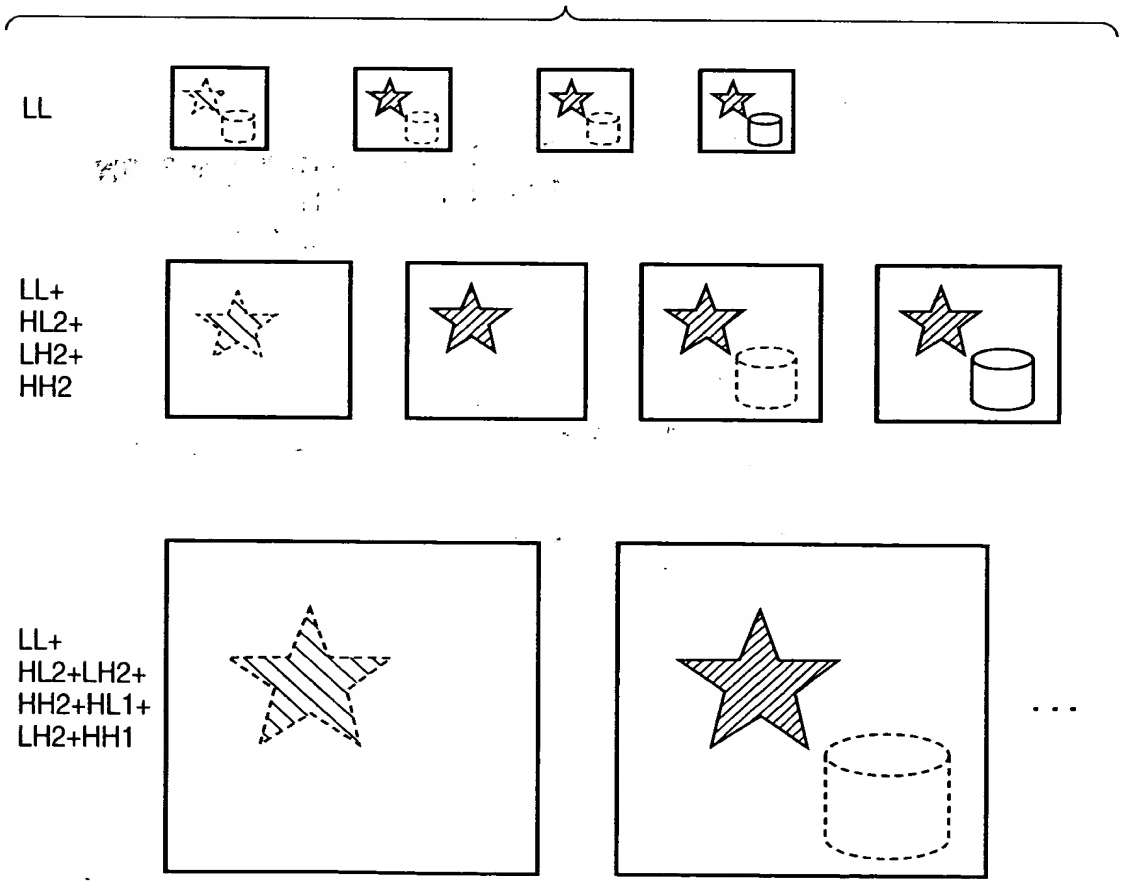


FIG. 15A

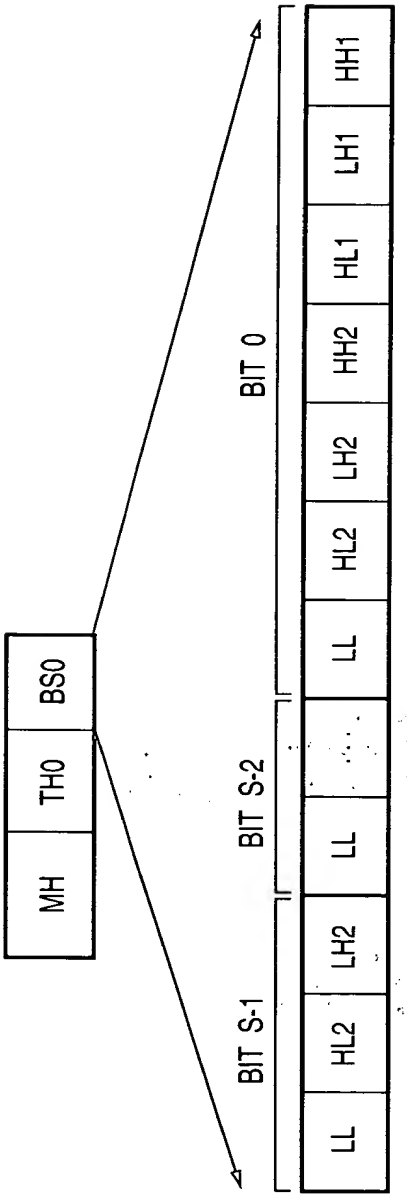


FIG. 15B

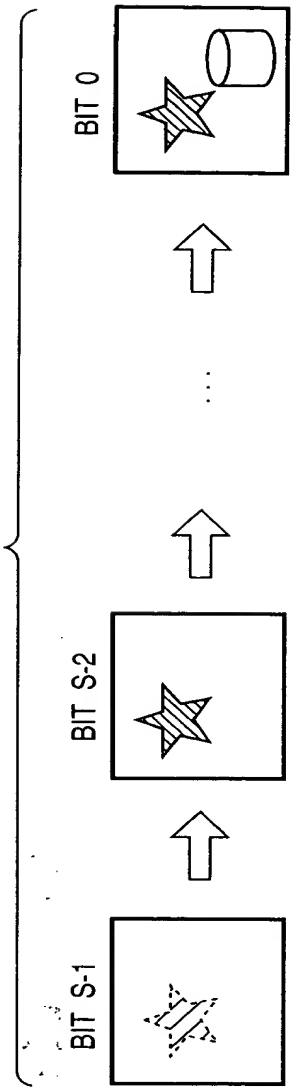


FIG. 16A

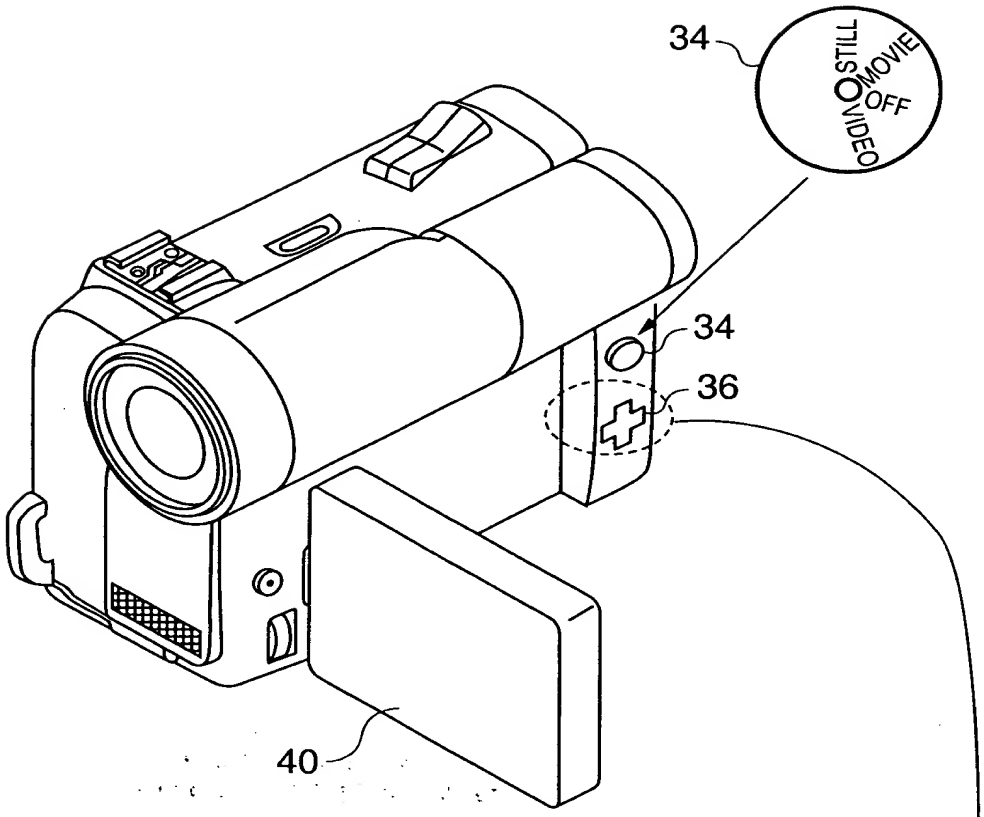


FIG. 16C

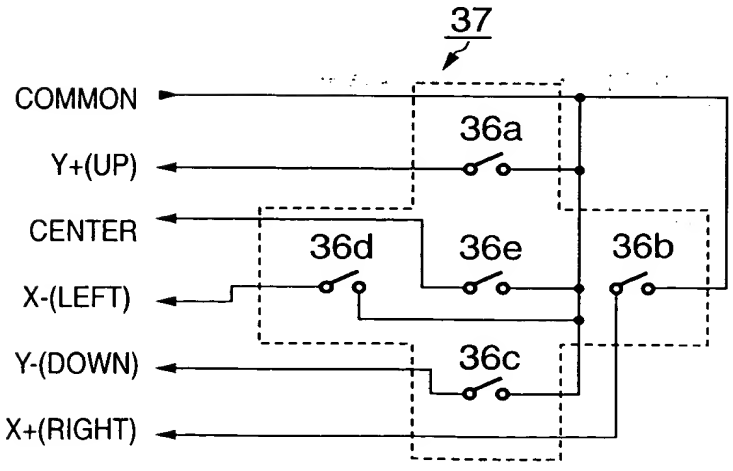


FIG. 16B

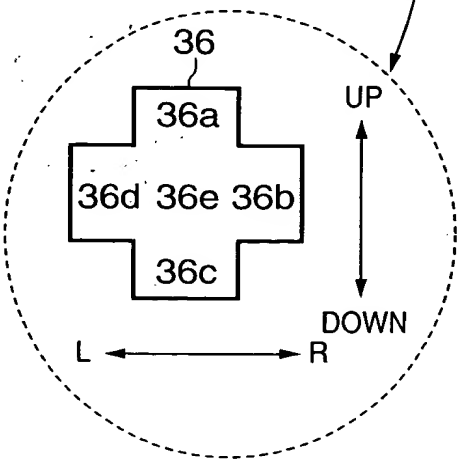


FIG. 17A

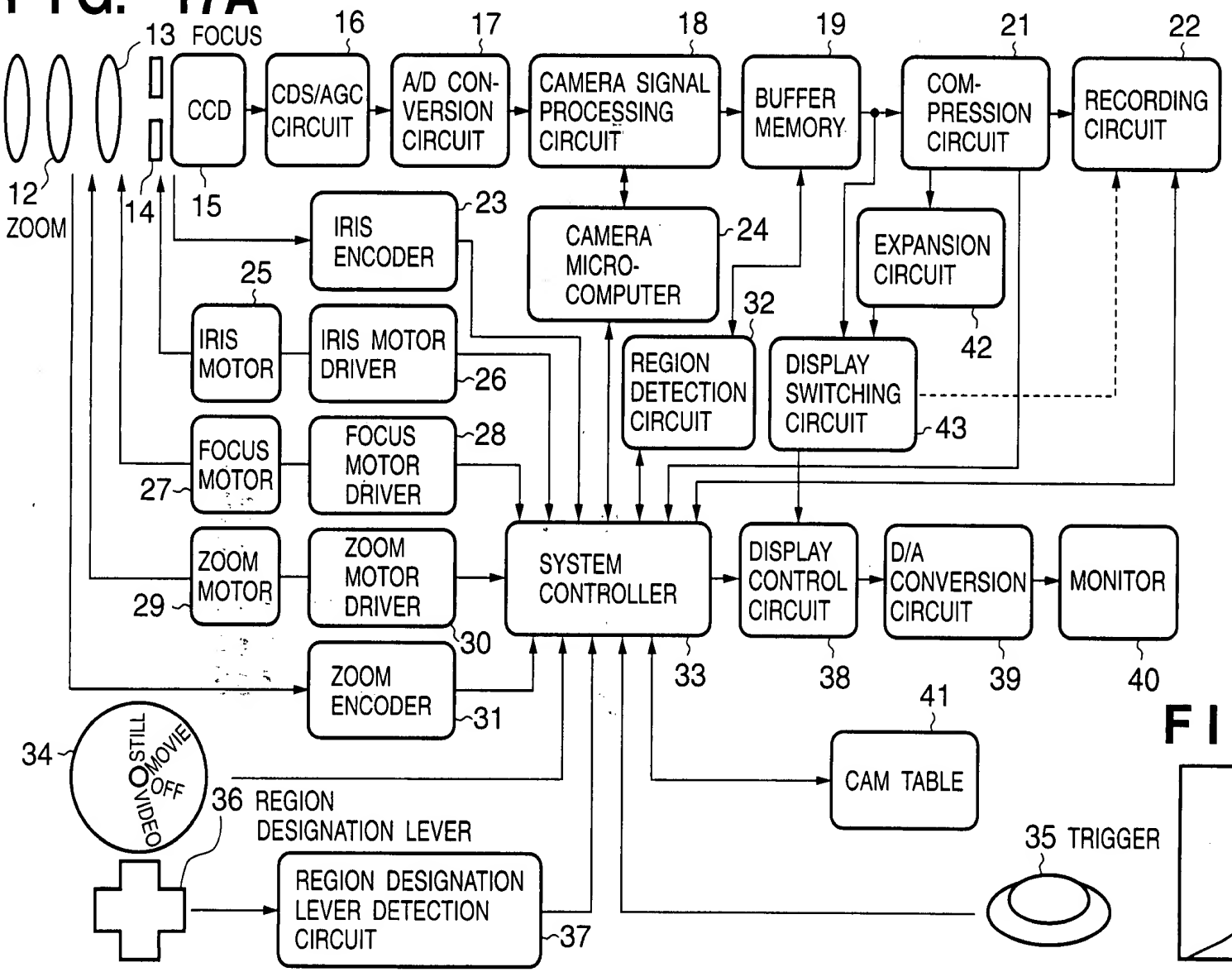


FIG. 17B

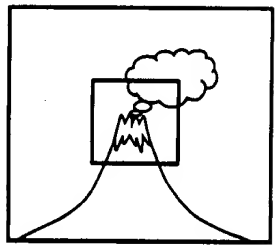


FIG. 18

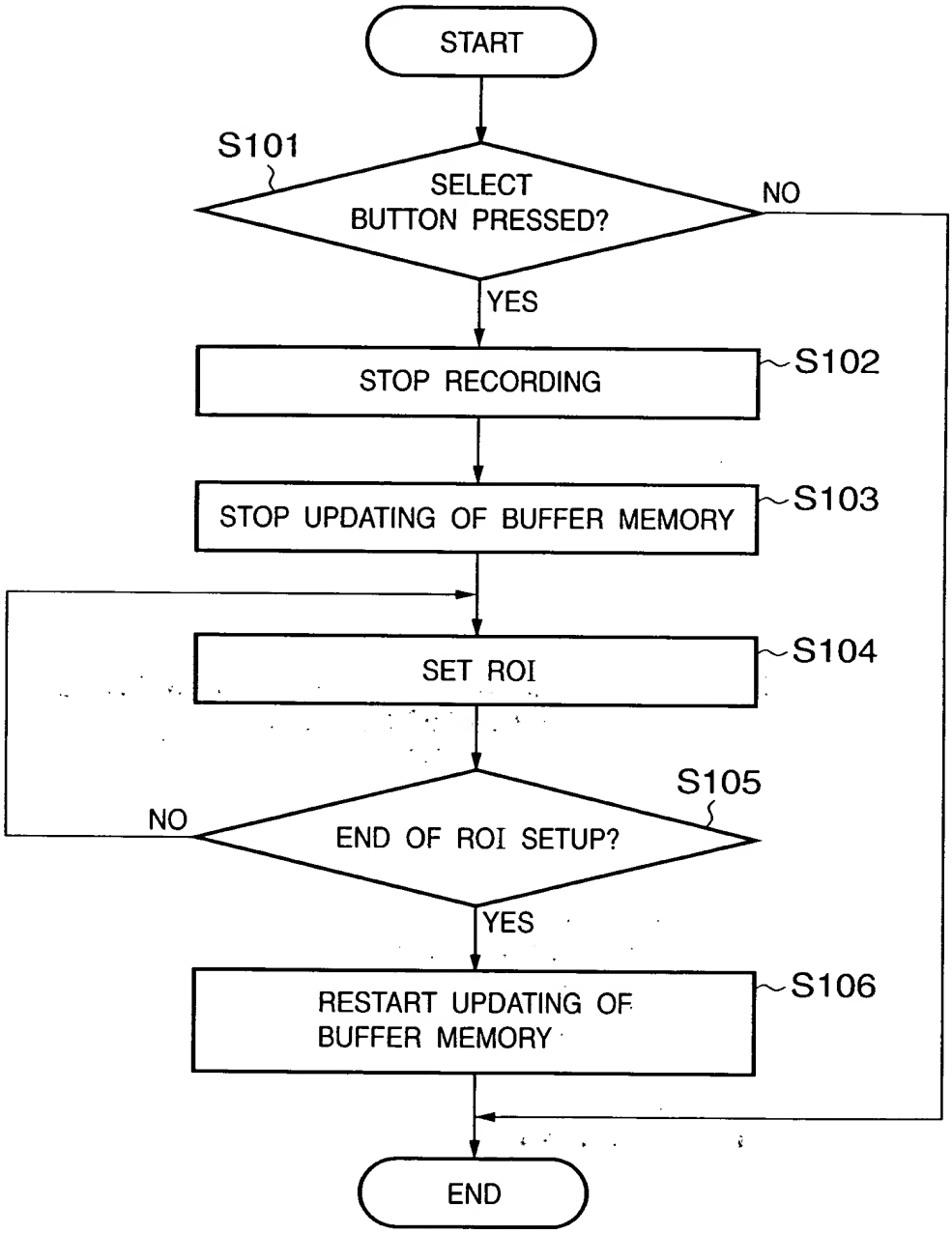

START
S101
SELECT BUTTON PRESSED?
NO
YES
STOP RECORDING
S102
STOP UPDATING OF BUFFER MEMORY
S103
SET ROI
S104
S105
NO
END OF ROI SETUP?
YES
RESTART UPDATING OF BUFFER MEMORY
S106
END

FIG. 19

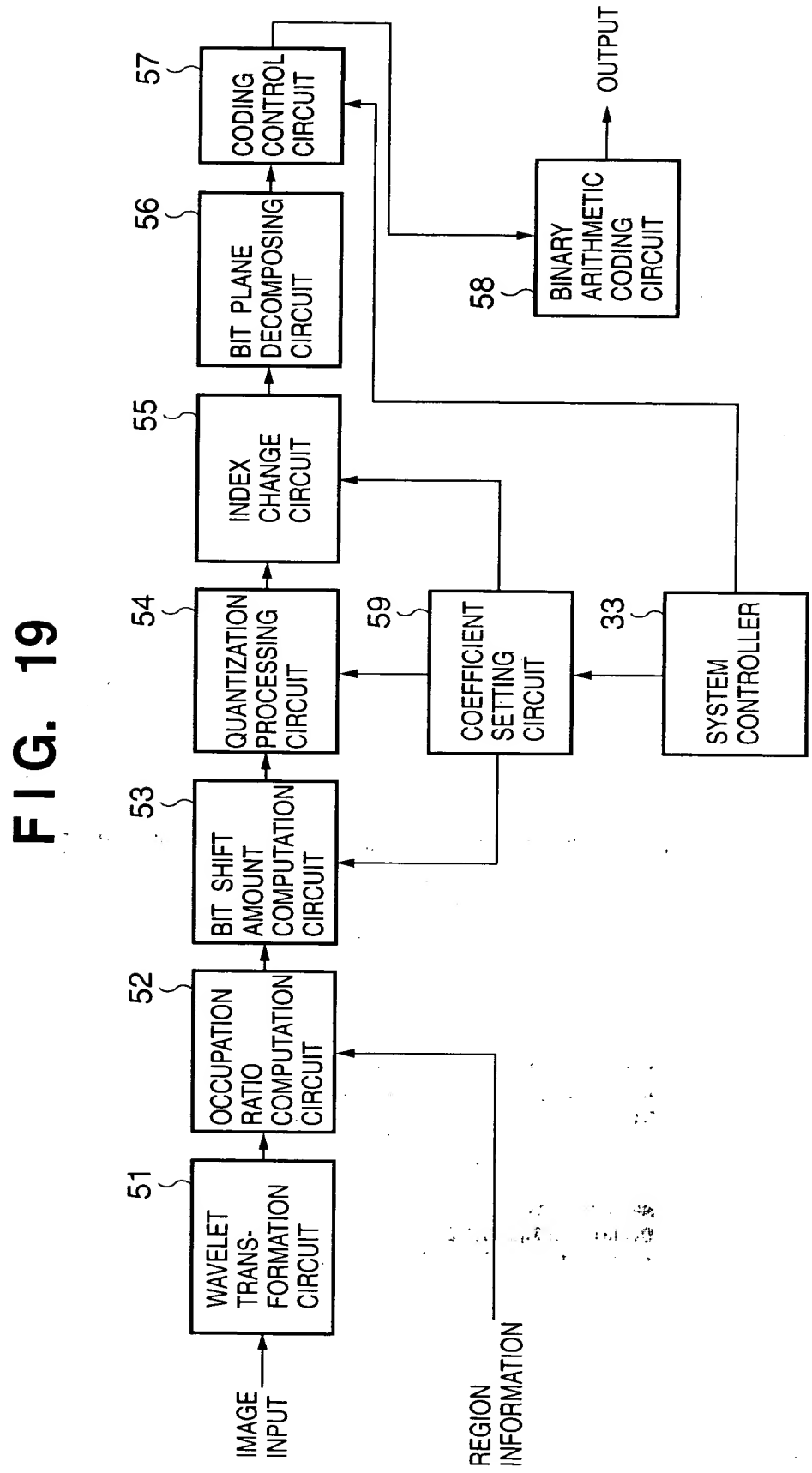


IMAGE INPUT
REGION INFORMATION
51
WAVELET TRANS-FORMATION CIRCUIT
52
OCCUPATION RATIO COMPUTATION CIRCUIT
53
BIT SHIFT AMOUNT COMPUTATION CIRCUIT
54
QUANTIZATION PROCESSING CIRCUIT
55
INDEX CHANGE CIRCUIT
56
BIT PLANE DECOMPOSING CIRCUIT
57
CODING CONTROL CIRCUIT
58
BINARY ARITHMETIC CODING CIRCUIT
OUTPUT
59
COEFFICIENT SETTING CIRCUIT
33
SYSTEM CONTROLLER

FIG. 20A

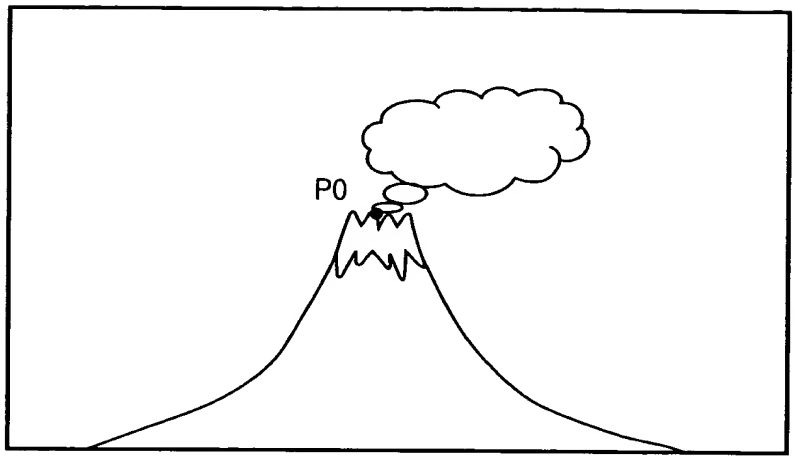


FIG. 20B

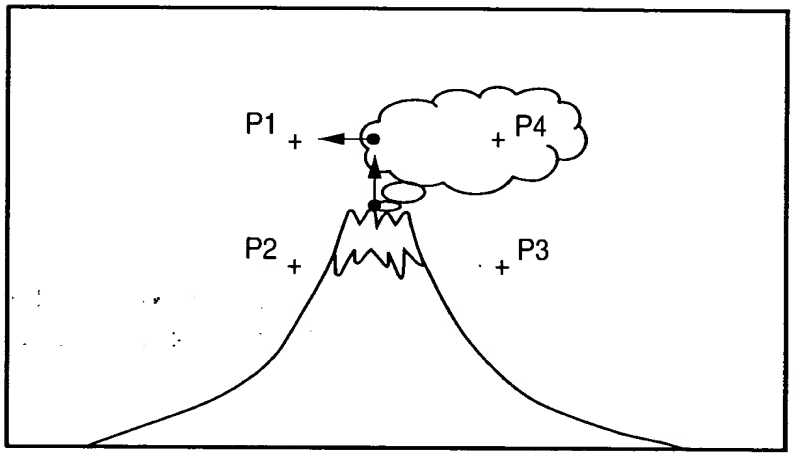


FIG. 20C

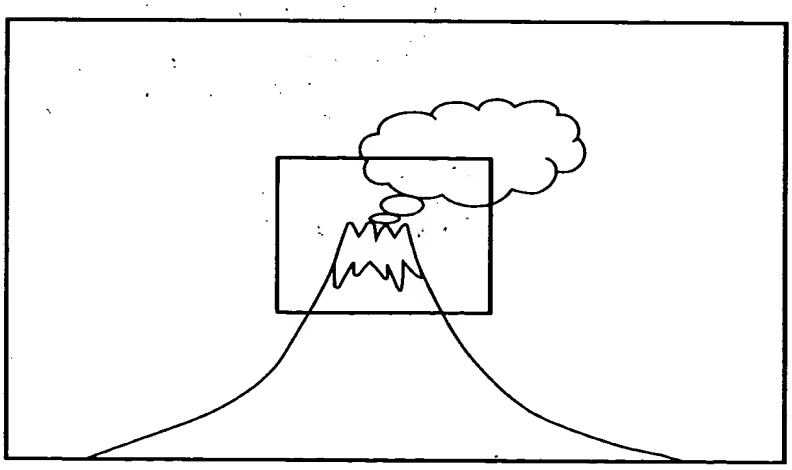


FIG. 21A

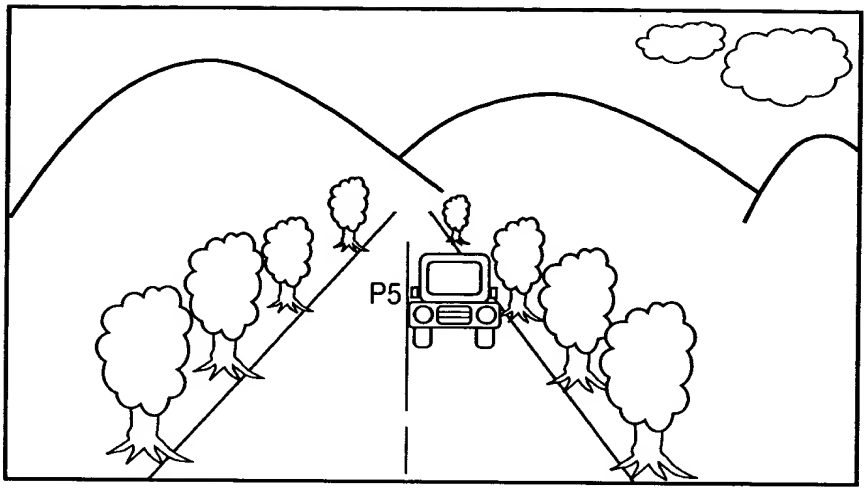


FIG. 21B

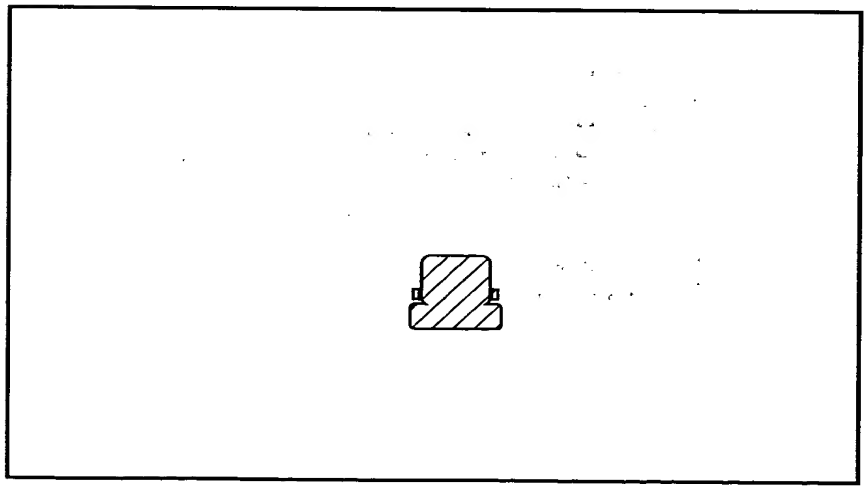


FIG. 22

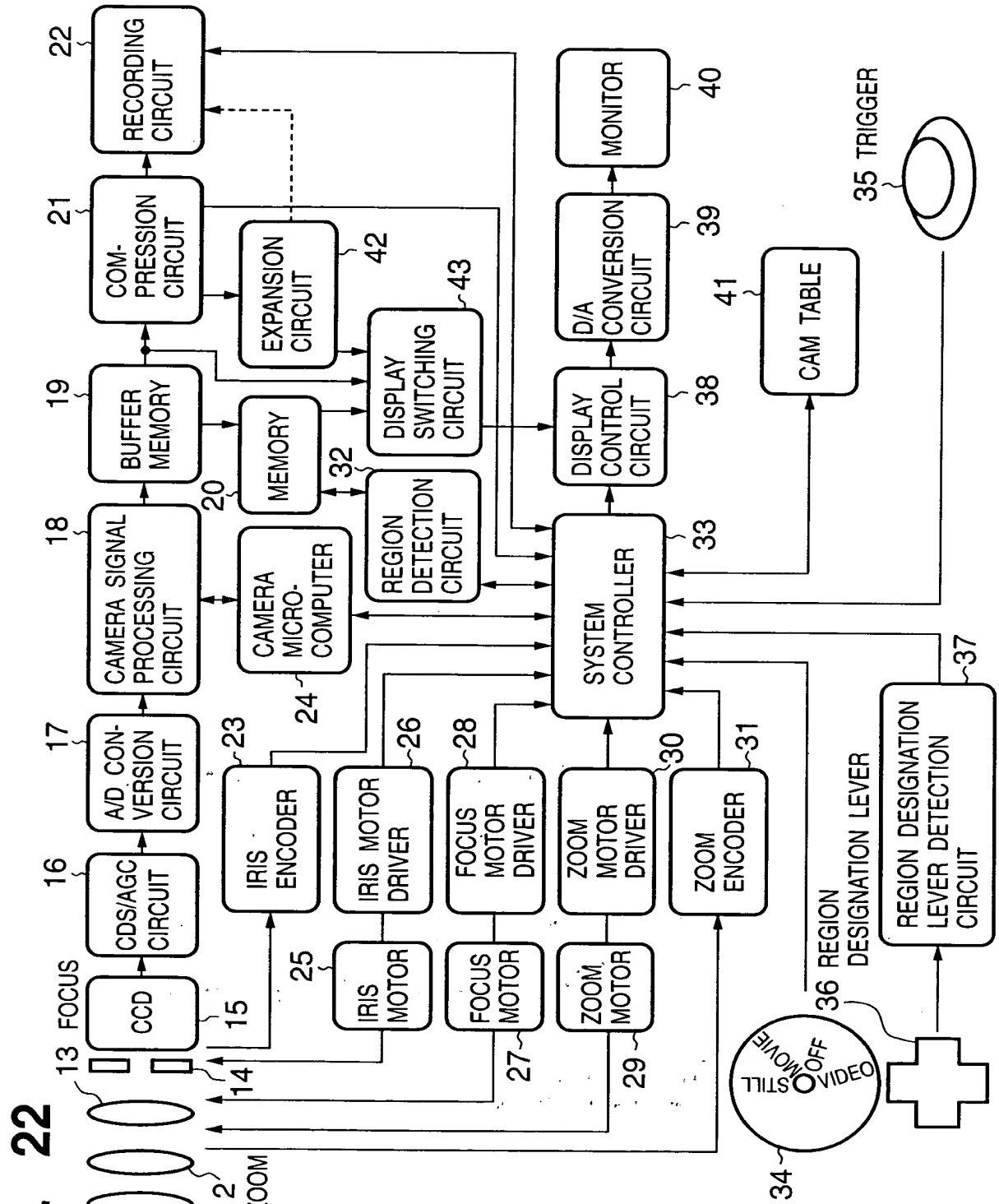

12 ZOOM
13 FOCUS
14
15 CCD
16 CDS/AGC CIRCUIT
17 A/D CONVERSION CIRCUIT
18 CAMERA SIGNAL PROCESSING CIRCUIT
19 BUFFER MEMORY
20 MEMORY
21 COMPRESSION CIRCUIT
22 RECORDING CIRCUIT
23 IRIS ENCODER
24 CAMERA MICRO-COMPUTER
25 IRIS MOTOR
26 IRIS MOTOR DRIVER
27 FOCUS MOTOR
28 FOCUS MOTOR DRIVER
29 ZOOM MOTOR
30 ZOOM MOTOR DRIVER
31 ZOOM ENCODER
32 REGION DETECTION CIRCUIT
33 SYSTEM CONTROLLER
34
STILL MOVIE OFF VIDEO
35 TRIGGER
36 REGION DESIGNATION LEVER
37 REGION DESIGNATION LEVER DETECTION CIRCUIT
38 DISPLAY CONTROL CIRCUIT
39 D/A CONVERSION CIRCUIT
40 MONITOR
41 CAM TABLE
42 EXPANSION CIRCUIT
43 DISPLAY SWITCHING CIRCUIT

FIG. 23

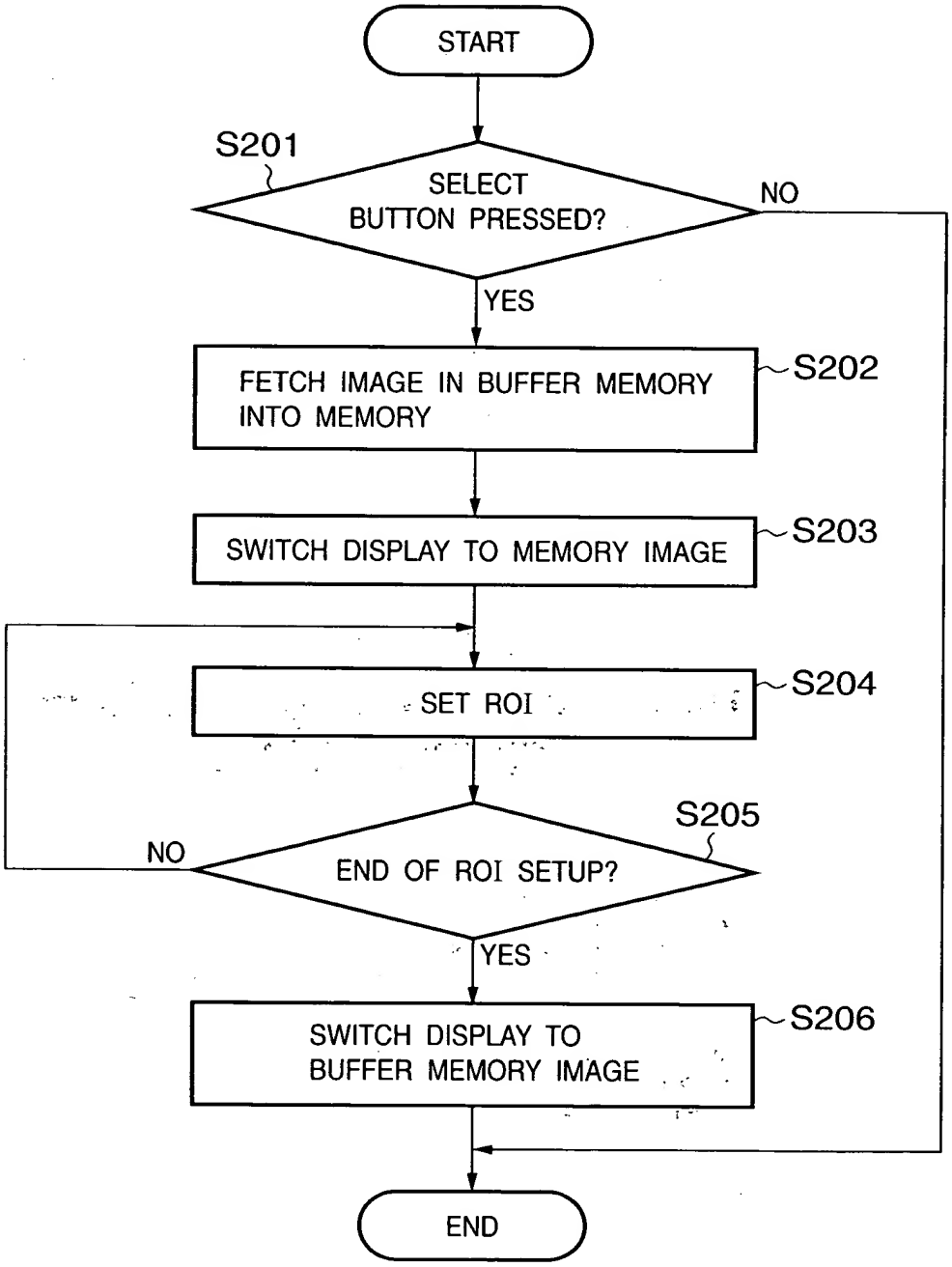

START
S201
SELECT BUTTON PRESSED?
NO
YES
FETCH IMAGE IN BUFFER MEMORY INTO MEMORY
S202
SWITCH DISPLAY TO MEMORY IMAGE
S203
SET ROI
S204
S205
NO
END OF ROI SETUP?
YES
SWITCH DISPLAY TO BUFFER MEMORY IMAGE
S206
END

FIG. 24

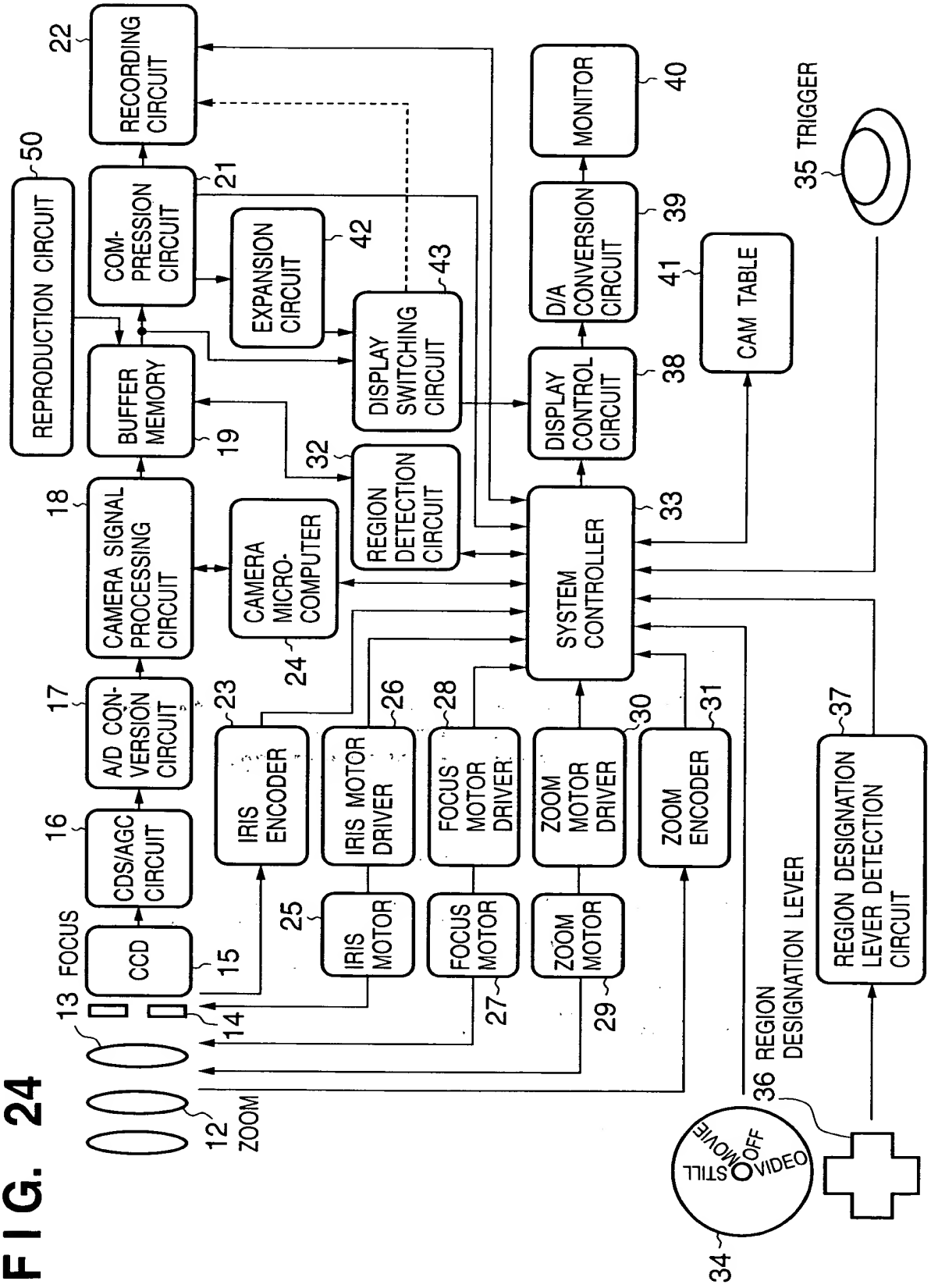

REPRODUCTION CIRCUIT
50
RECORDING CIRCUIT
22
COM-PRESSION CIRCUIT
21
EXPANSION CIRCUIT
42
DISPLAY SWITCHING CIRCUIT
43
BUFFER MEMORY
19
DISPLAY CONTROL CIRCUIT
38
D/A CONVERSION CIRCUIT
39
MONITOR
40
CAM TABLE
41
35 TRIGGER
CAMERA SIGNAL PROCESSING CIRCUIT
18
CAMERA MICRO-COMPUTER
24
REGION DETECTION CIRCUIT
32
SYSTEM CONTROLLER
33
A/D CON-VERSION CIRCUIT
17
CDS/AGC CIRCUIT
16
CCD
15
13 FOCUS
14
12 ZOOM
IRIS ENCODER
23
IRIS MOTOR DRIVER
26
IRIS MOTOR
25
FOCUS MOTOR DRIVER
28
FOCUS MOTOR
27
ZOOM MOTOR DRIVER
30
ZOOM MOTOR
29
ZOOM ENCODER
31
REGION DESIGNATION LEVER DETECTION CIRCUIT
37
36 REGION DESIGNATION LEVER
STILL
MOVIE
OFF
VIDEO
34

FIG. 25

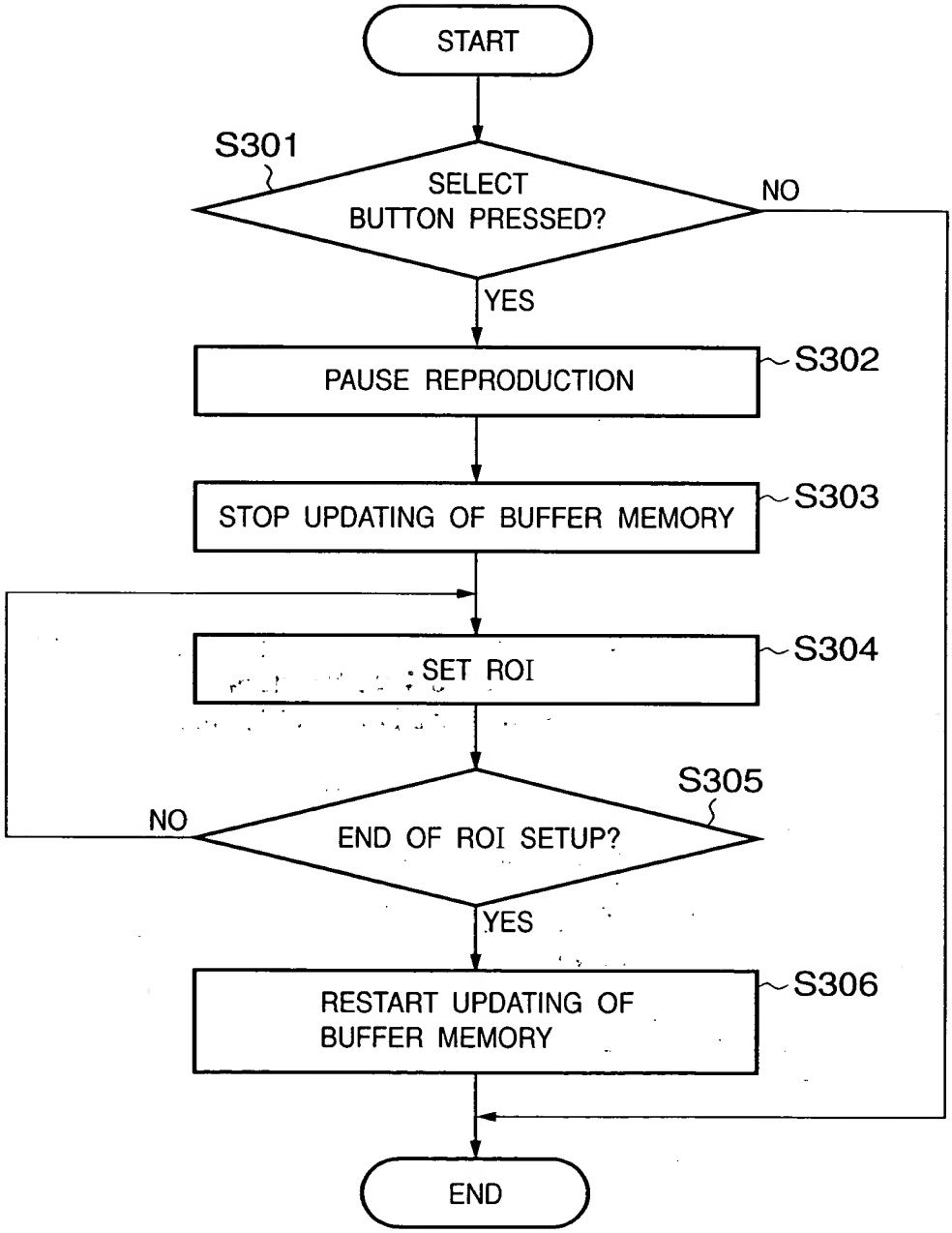

START
S301
SELECT BUTTON PRESSED?
NO
YES
PAUSE REPRODUCTION
S302
STOP UPDATING OF BUFFER MEMORY
S303
SET ROI
S304
S305
NO
END OF ROI SETUP?
YES
RESTART UPDATING OF BUFFER MEMORY
S306
END

FIG. 26

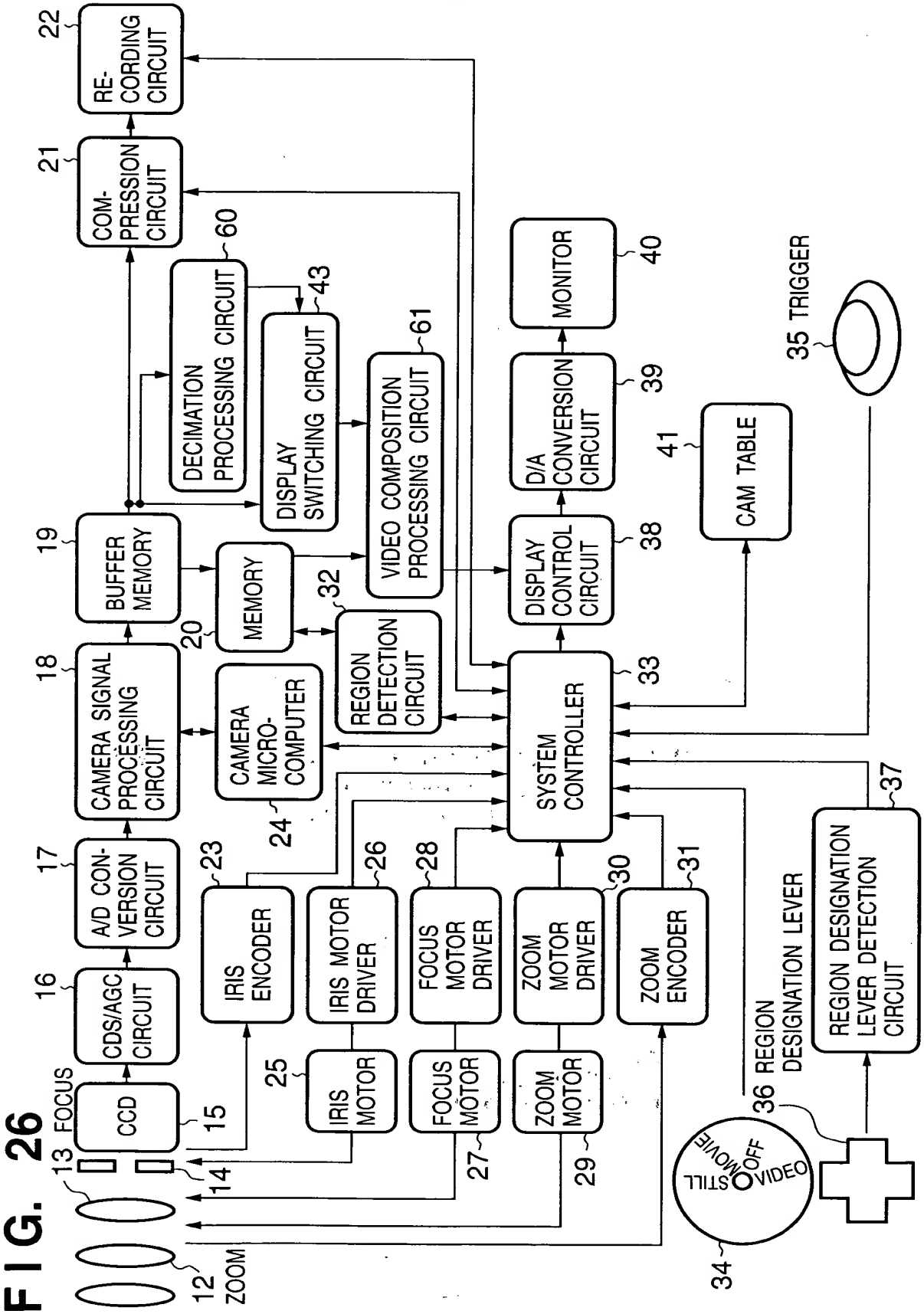
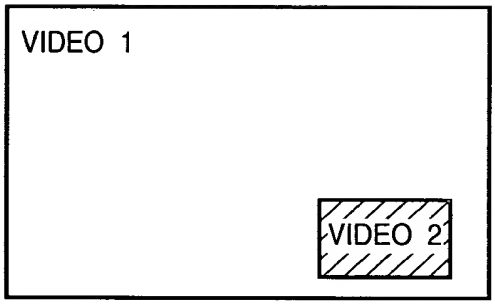

12 ZOOM
13 FOCUS
14
15
CCD
16
CDS/AGC CIRCUIT
17
A/D CONVERSION CIRCUIT
18
CAMERA SIGNAL PROCESSING CIRCUIT
19
BUFFER MEMORY
20
MEMORY
21
COMPRESSION CIRCUIT
22
RECORDING CIRCUIT
23
IRIS ENCODER
24
CAMERA MICRO-COMPUTER
25
IRIS MOTOR
26
IRIS MOTOR DRIVER
27
28
FOCUS MOTOR
FOCUS MOTOR DRIVER
29
30
ZOOM MOTOR
ZOOM MOTOR DRIVER
31
ZOOM ENCODER
32
REGION DETECTION CIRCUIT
33
SYSTEM CONTROLLER
34
STILL
MOVIE
OFF
VIDEO
35 TRIGGER
36 REGION DESIGNATION LEVER
37
REGION DESIGNATION LEVER DETECTION CIRCUIT
38
DISPLAY CONTROL CIRCUIT
39
D/A CONVERSION CIRCUIT
40
MONITOR
41
CAM TABLE
43
DISPLAY SWITCHING CIRCUIT
60
DECIMATION PROCESSING CIRCUIT
61
VIDEO COMPOSITION PROCESSING CIRCUIT

FIG. 27



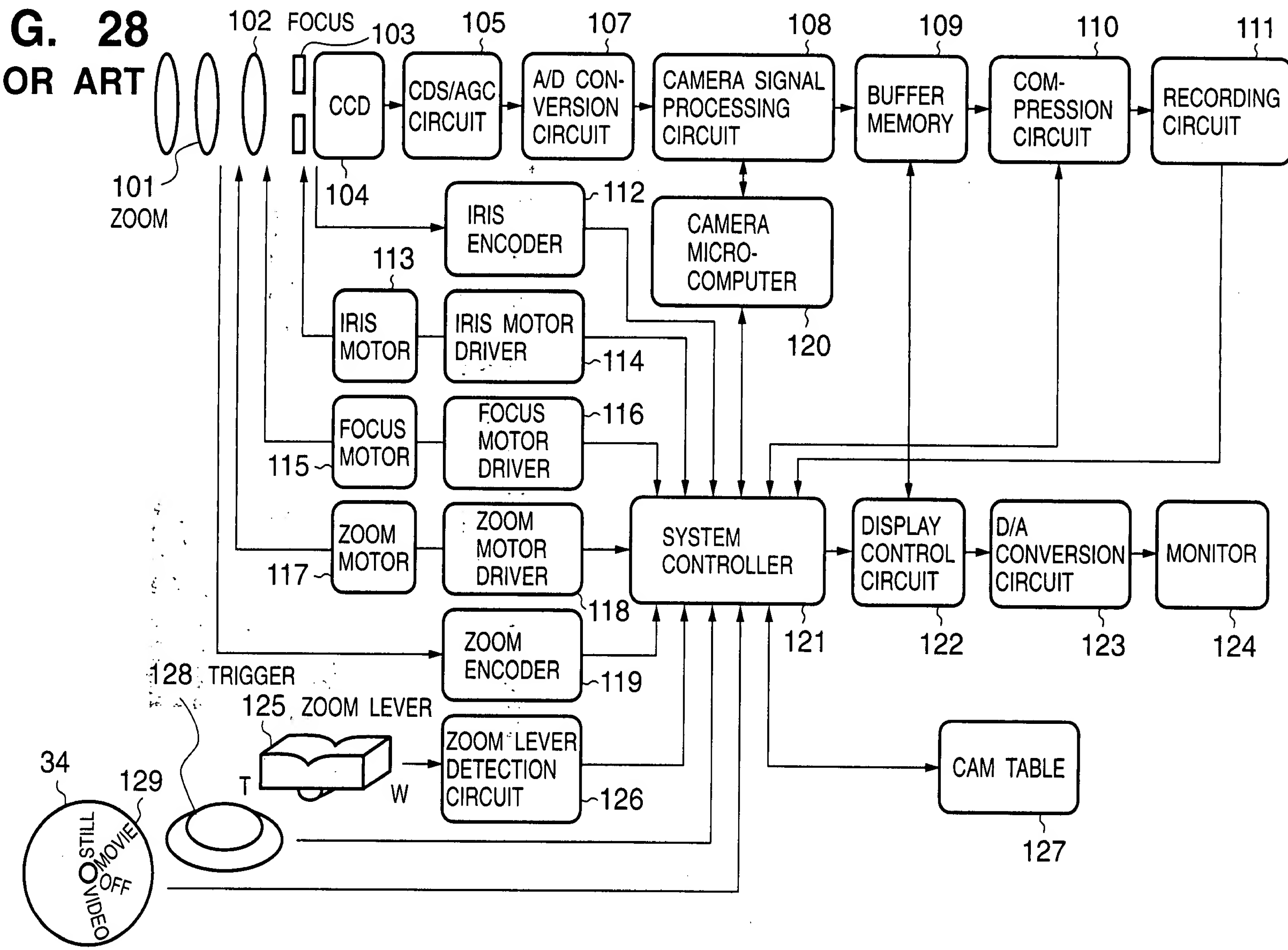


FIG. 28
PRIOR ART

FIG. 29
PRIOR ART

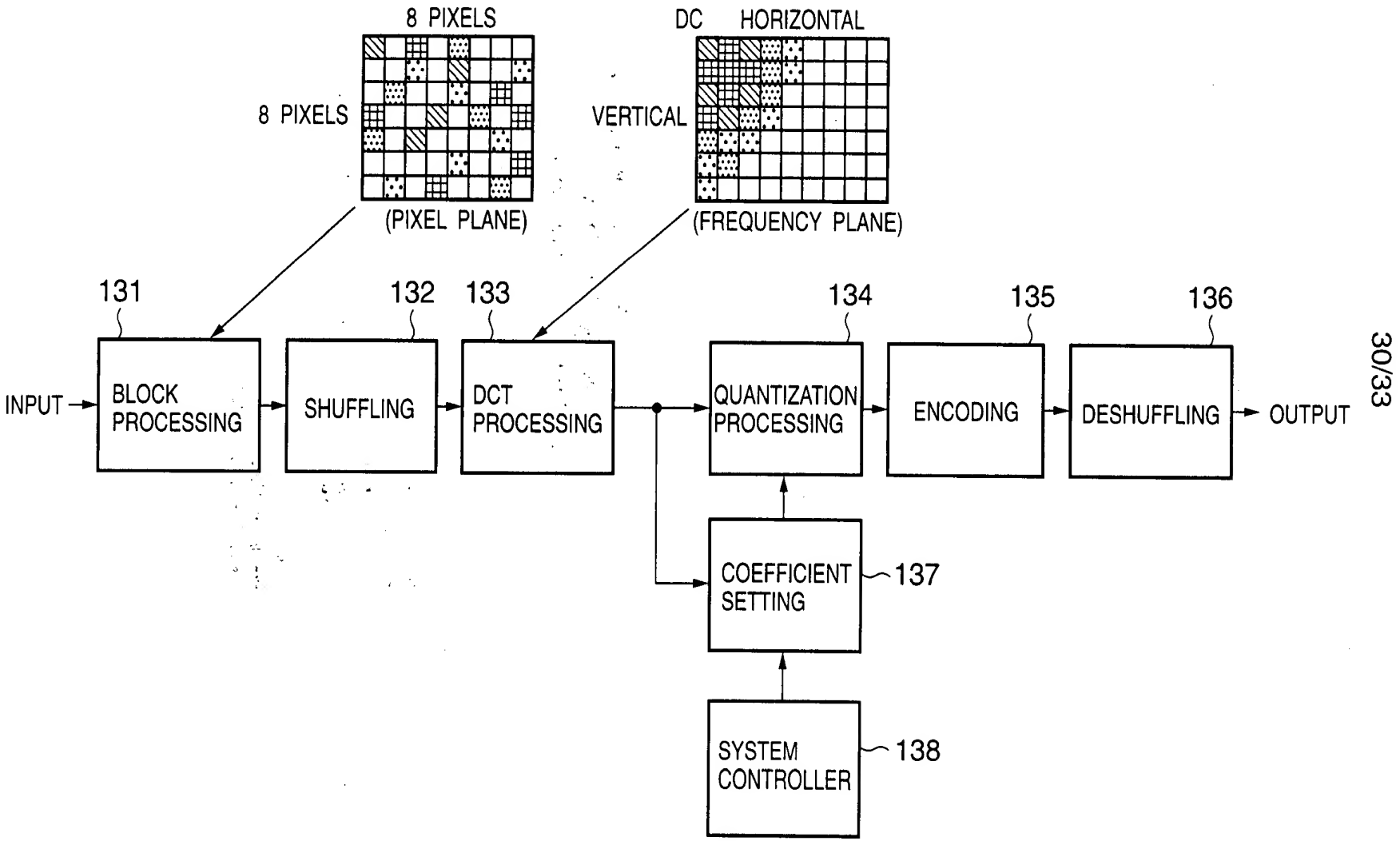


FIG. 30

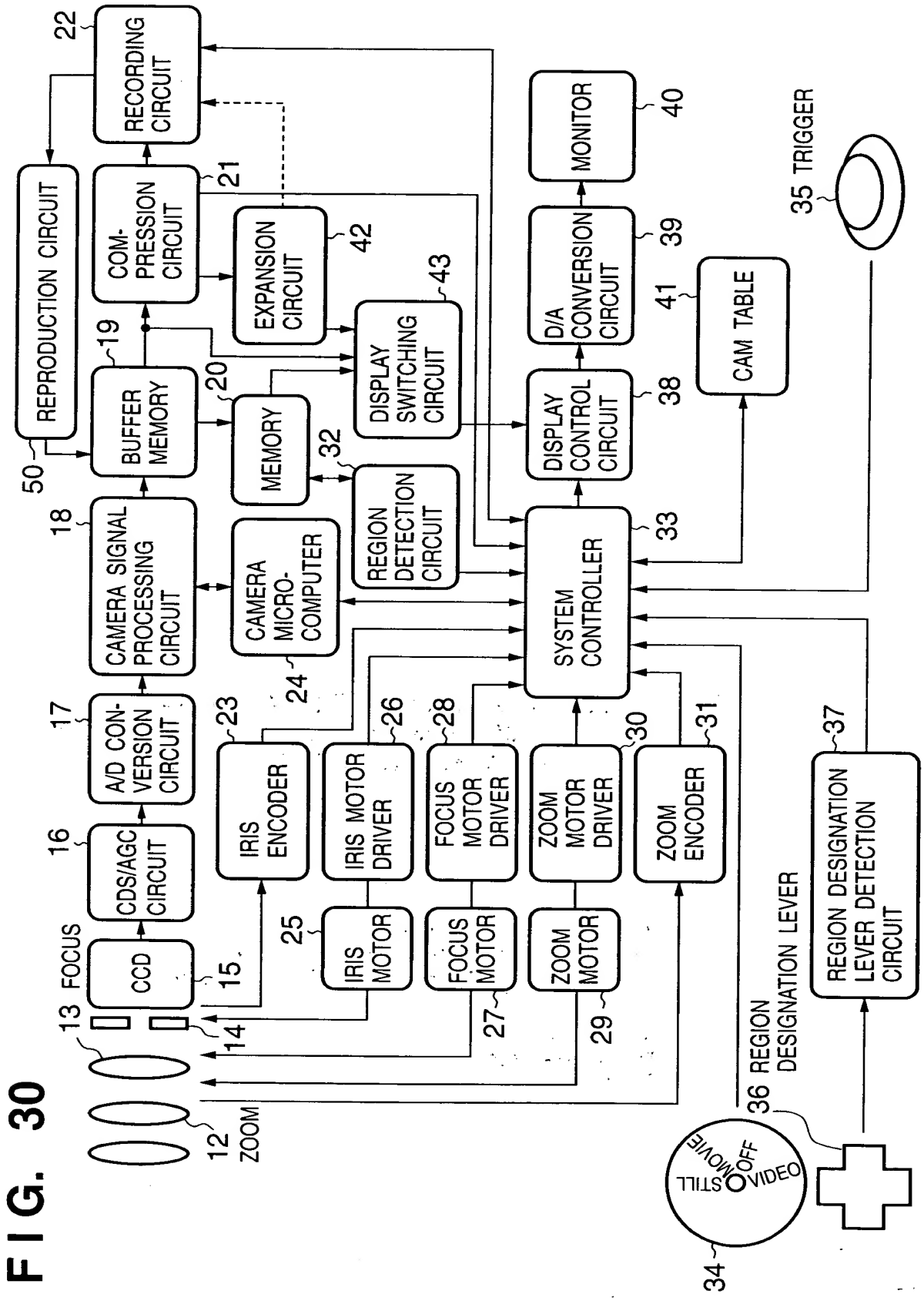

12 ZOOM
13 FOCUS
14
15 CCD
16 CDS/AGC CIRCUIT
17 A/D CONVERSION CIRCUIT
18 CAMERA SIGNAL PROCESSING CIRCUIT
19 BUFFER MEMORY
20 MEMORY
21 COMPRESSION CIRCUIT
22 RECORDING CIRCUIT
23 IRIS ENCODER
24 CAMERA MICRO-COMPUTER
25 IRIS MOTOR
26 IRIS MOTOR DRIVER
27 FOCUS MOTOR
28 FOCUS MOTOR DRIVER
29 ZOOM MOTOR
30 ZOOM MOTOR DRIVER
31 ZOOM ENCODER
32 REGION DETECTION CIRCUIT
33 SYSTEM CONTROLLER
34 STILL MOVIE OFF VIDEO
35 TRIGGER
36 REGION DESIGNATION LEVER
37 REGION DESIGNATION LEVER DETECTION CIRCUIT
38 DISPLAY CONTROL CIRCUIT
39 D/A CONVERSION CIRCUIT
40 MONITOR
41 CAM TABLE
42 EXPANSION CIRCUIT
43 DISPLAY SWITCHING CIRCUIT
50 REPRODUCTION CIRCUIT

FIG. 31

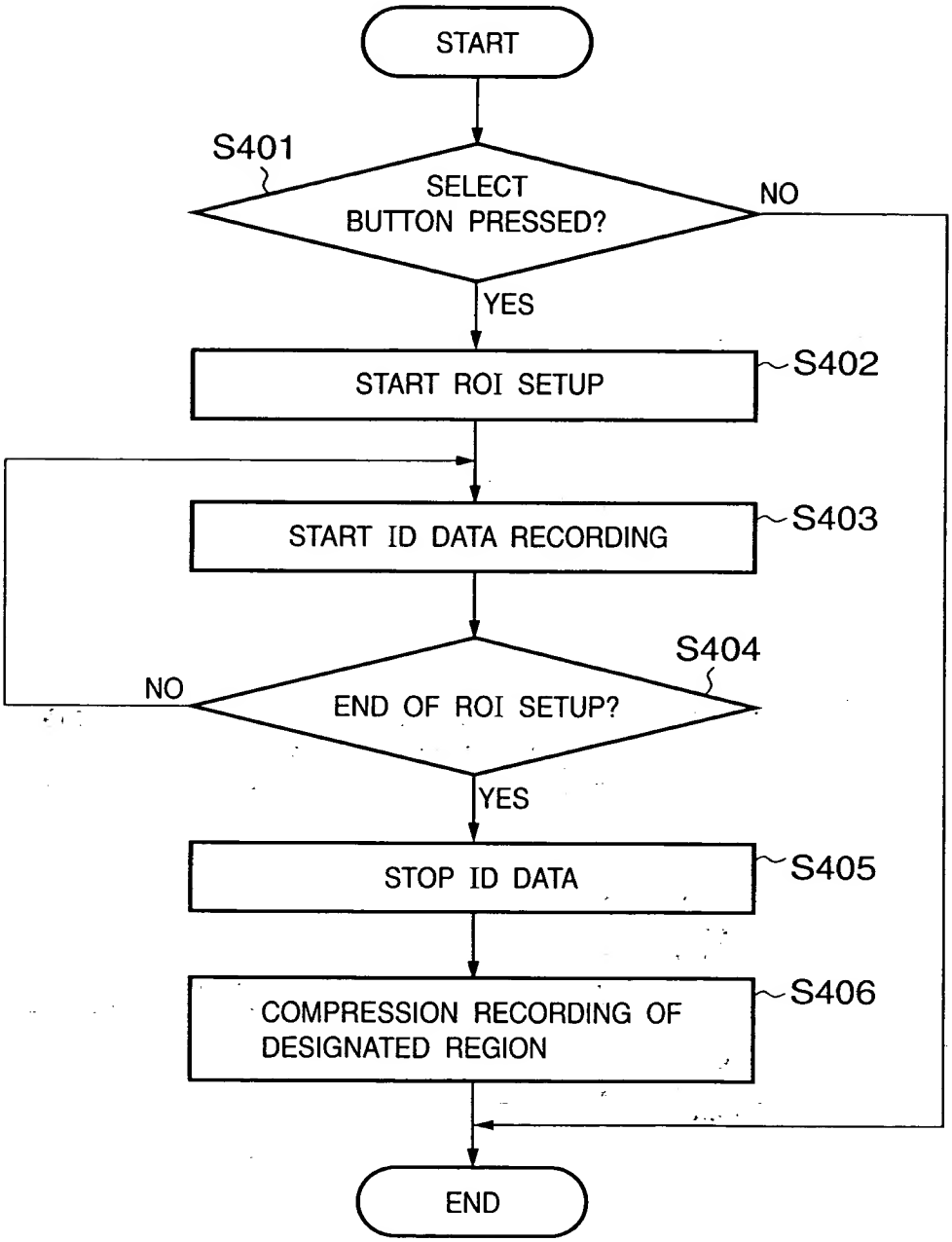
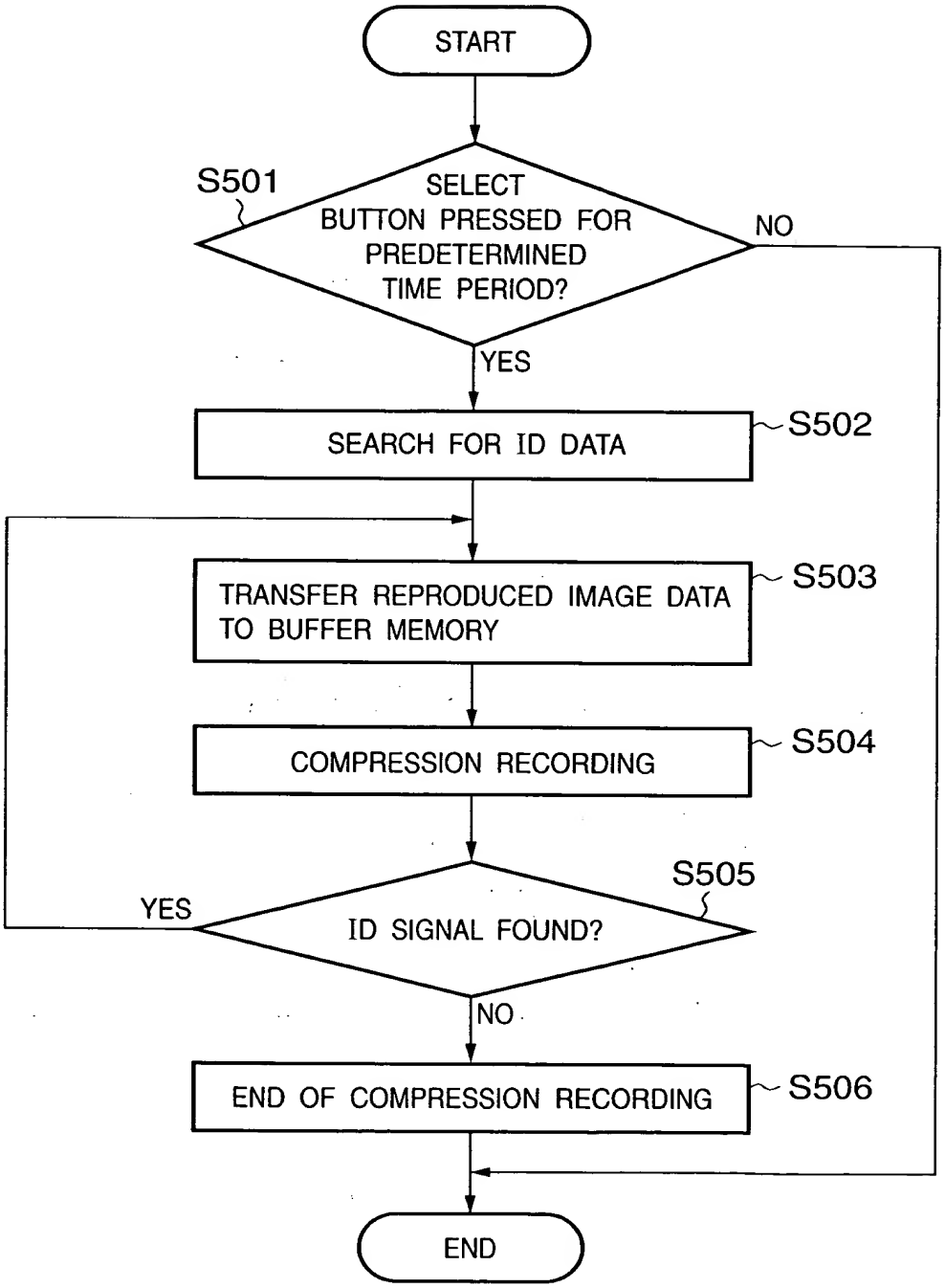

START
S401
SELECT BUTTON PRESSED?
NO
YES
START ROI SETUP
S402
START ID DATA RECORDING
S403
S404
NO
END OF ROI SETUP?
YES
STOP ID DATA
S405
COMPRESSION RECORDING OF DESIGNATED REGION
S406
END

FIG. 32


START
S501
SELECT BUTTON PRESSED FOR PREDETERMINED TIME PERIOD?
NO
YES
SEARCH FOR ID DATA
S502
TRANSFER REPRODUCED IMAGE DATA TO BUFFER MEMORY
S503
COMPRESSION RECORDING
S504
S505
YES
ID SIGNAL FOUND?
NO
END OF COMPRESSION RECORDING
S506
END